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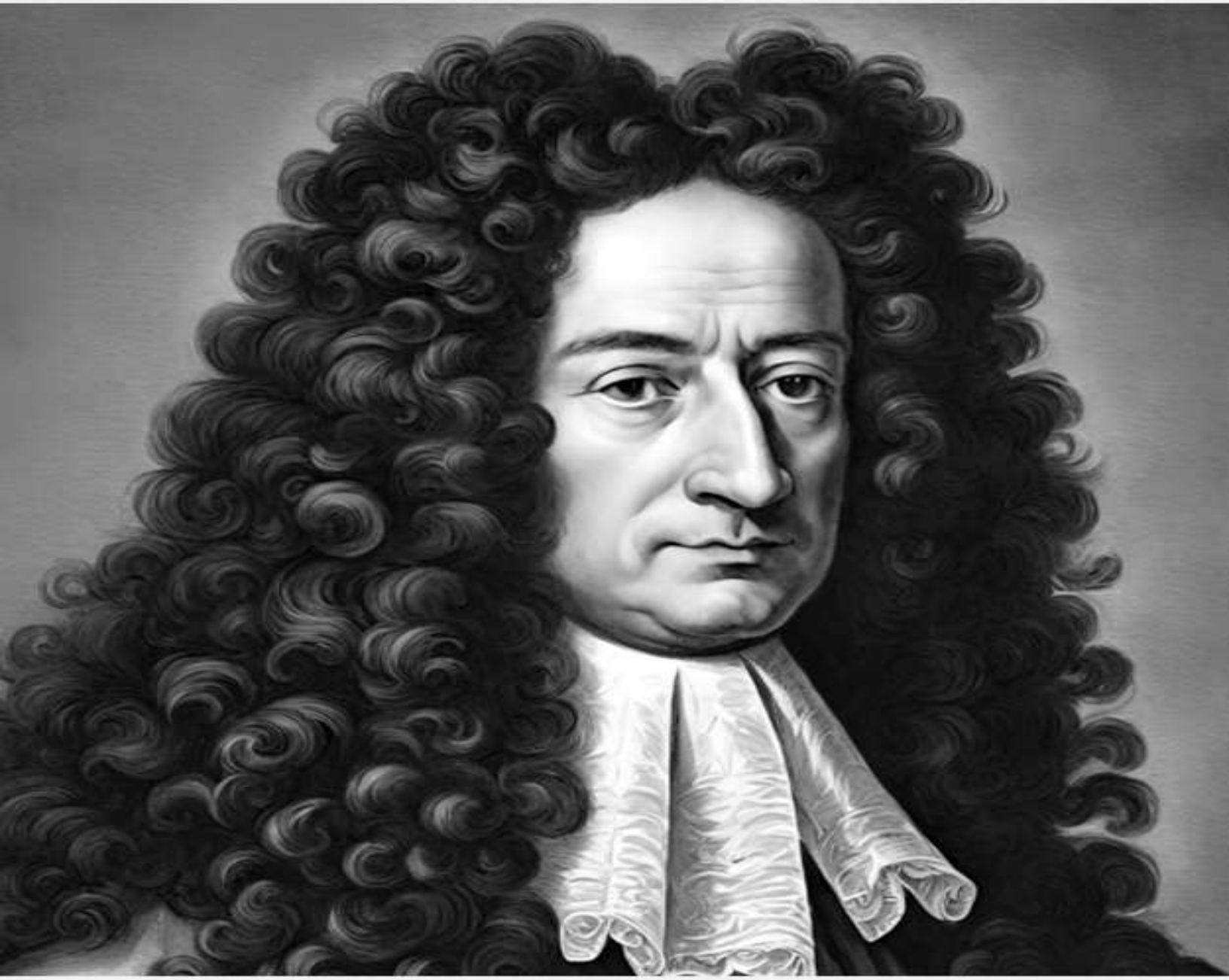
Gottfried Wilhelm Leibniz

Collected Works



Series Fifteen

The Collected Works of

GOTTFRIED WILHELM LEIBNIZ

(1646-1716)

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Version 1

The Collected Works of

GOTTFRIED WILHELM LEIBNIZ

By Delphi Classics, 2025

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Collected Works of Gottfried Wilhelm Leibniz

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DELPHI CLASSICS

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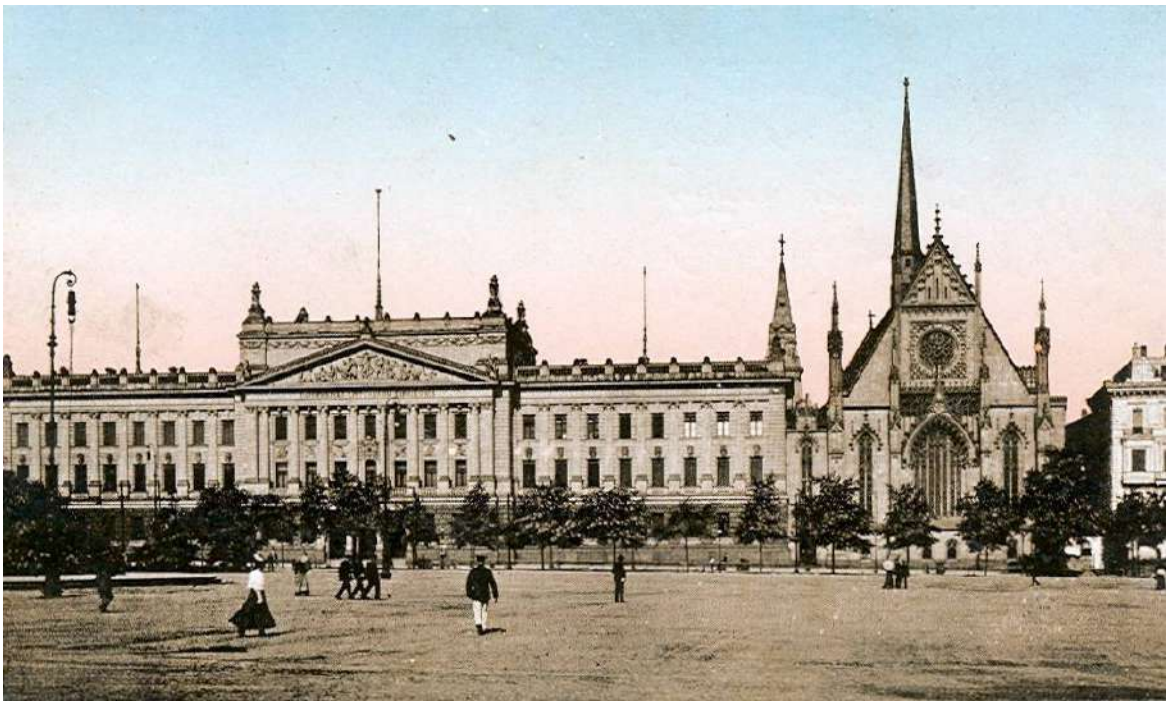
The Works

Leipzig, the most populous city in the German state of Saxony, c. 1804 — Gottfried Wilhelm Leibniz' birthplace

Leipzig today

Alte Nikolaischule, the first municipal school in Leipzig, which Leibniz attended for six years



Germany's second oldest university, Leipzig University main building in 1917. It was demolished by the socialist administration in 1968 — Leibniz' father had been a Professor of Moral Philosophy at the University of Leipzig, where he also served as dean of philosophy. In April 1661 Leibniz enrolled here at age 14 and completed his bachelor's degree in Philosophy in December 1662.

System of Theology (1686)

Original Title: 'Systema theologicum'

Translated by Charles William Russell, 1850

Gottfried Wilhelm von Leibniz was born in Leipzig in 1646. He entered the University of Leipzig as a student of philosophy and law, and in 1666 he obtained the degree of Doctor of Law at Altdorf. The following year he met the diplomat Baron von Boineburg, at whose suggestion he entered the diplomatic service of the Elector of Mainz. During the years of 1672 to 1676, he served as the diplomatic representative of Mainz at the Court of Louis XIV. He also paid a visit to London and made the acquaintance of the learned English mathematicians, scientists and theologians of the day. While at Paris he became acquainted with prominent representatives of Catholicism and was soon interested in the questions that were in dispute between Catholics and Protestants. In 1676 he accepted the position of librarian, archivist and court councillor to the Johann Friedrich, Duke of Brunswick, who was a recent convert to Catholicism.

Almost immediately Leibniz began to exert himself in the cause of reconciliation between Catholics and Protestants. At Paris he had come to know many prominent Jesuits and Oratorians, and at this time he stared his celebrated correspondence with Bossuet. With the sanction of the Duke and the approval of Innocent XI, the project to find a basis of agreement between Protestants and Catholics in Hanover was inaugurated. Leibniz soon took the place of Molanus, president of the Hanoverian Consistory, as the representative of the Protestant claims. He tried to reconcile the Catholic principle of authority with the Protestant principle of free enquiry. He

favoured a species of syncretic Christianity first proposed at the University of Helmstadt, which adopted for its creed an eclectic formula made up of the dogmas supposed to have been held by the primitive Church. At length, he drew up a statement of Catholic doctrine, entitled “Systema Theologicum”, which met the approval not only of Bishop Spinola of Wiener-Neustadt, who conducted the case for the Catholics, but also of the Pope, the Cardinals, the General of the Jesuits, the Master of the Sacred Palace and various others.

Leibniz was actuated as much by patriotic motives as he was by religious reasons. He saw clearly that one of the greatest sources of weakness in the German States was the lack of religious unity and the absence of the spirit of toleration. The role he played was that of a diplomat rather than that of a theologian. However, his correspondence with Bossuet and Pelisson and his acquaintance with many prominent Catholics produced a change in his attitude towards the Church, and, although he adopted for his own creed a kind of eclectic rationalistic Christianity, he ceased in 1696 to attend Protestant services.

Leibniz by Andreas Scheits, Bibliothèque de Hanovre, 1703

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John Frederick by Johann Hulsman, c. 1675 — as Duke of Brunswick-Lüneburg, Frederick ruled over the Principality of Calenberg, a subdivision of the duchy, from 1665 until his death.

SYSTEM OF THEOLOGY.

AFTER A LONG and mature examination of the controversies on the subject of religion, in which I have invoked the Divine assistance, and divested myself, as far, perhaps, as is possible for man, of party-feeling, as though I came from a new world, a neophyte unattached to any party, I have at length fixed in my own mind, and, after full consideration, resolved to adopt, the following principles, which, to an unprejudiced man, will appear to carry with them the recommendation of sacred Scripture, of pious antiquity, and even of right reason and the authority of history.

In the first place, then, I believe in the existence of a Most Perfect Substance, one, eternal, omnipresent, omniscient, and almighty, which we call GOD; by whom all other things have been created in a most beautiful order, and are preserved by a sort of continual production. The doctrine, therefore, of those who conceive God to be corporeal, finite, circumscribed by place, and ignorant of future contingent events, whether absolute or conditional, is utterly intolerable; and hence I strongly reprobate certain Anti-trinitarians and kindred sectaries, who have not spared even this first principle of faith, and who entertain most unworthy conceptions of God.

Now this Supreme Intelligence created, in order to his own glory, other intellectual beings, whom He governs with most perfect justice; insomuch that any one who could understand the whole order of the Divine economy, would find therein a model of the most perfect form of commonwealth, in which it would be impossible for a philosopher to discover a single want, or to supply any thing in desire.

Hence we must avoid those opinions which represent God as a certain Supreme Power, from which all things, although they emanate, yet emanate

indiscriminately, by a kind of necessary existence, and without any selection of the beautiful or the good; as if these notions were arbitrary, or had no foundation in nature, but only in the imagination of men. For God is not only the supreme Creator of all existing things, but He is also the beneficent Prince of all intellectual beings, and in some sense their Legislator; — a Legislator, however, who requires nothing from his subjects but souls actuated by sincere affection, animated with a right intention, persuaded of the beneficence, the consummate justice, the beauty, and goodness, of the most amiable of all lords; and therefore, not merely fearing his power as that of a supreme and all-seeing Monarch, but also confiding in his benevolence, and, in fine, glowing with the love of Him above all things — a sentiment which comprises all the rest.

For those who are impressed with such sentiments, who fix them deeply in their souls, and evince in their lives the sincerity of their convictions, never murmur against the Divine will; being well assured that all things must conduce to the good of those who love God: and, as they are content with the past, so, in what concerns the future, they seek always to act in conformity with that which they presume to be the will of God. Now all that God, in proposing rewards and punishments, requires of each of us, is, that he labour for the fulfilment of his own especial duties; that, like the first man, he cultivate the garden in which he has been placed, and that, in imitation of the divine goodness, he diffuse his beneficence on every object around him, but especially, within the due proportions which justice requires, on all those with whom he may be thrown into intercourse, as being his neighbours; because, among the creatures which come within our sphere, there is none more excellent than man, none whose perfection is more grateful to God.

If, therefore, all intelligent beings always thought and acted in accordance with these principles, they would unquestionably live happily.

But as it is certain that this neither always is, nor has been, the case, a question arises, whence it is that sin, and through sin, misery, entered into the world; for it is clear that God, the author of all good, cannot be the cause of sin. It must be borne in mind, therefore, that in all creatures, however exalted, there is, antecedent to all sin, a certain inborn and original finiteness, which renders them liable to fall; and in this sense is to be understood the sentiment which Job appears to have meant to convey, that not even the holiest angels are free from stain, that is, from imperfection. Nor is this incompatible with the existence of original justice in "God's image because the rational creature, in so far as it is perfect, derives this perfection from the Divine image; but in so far as it is limited and devoid of certain perfections, so far does it partake of privation, or of nothing. And this is the purport of St. Augustine's opinion, that the cause of evil arises not from God, but from nothing; that is, not from the positive, but from the privative; — or, in other words, from that finiteness of creatures of which we have already spoken.

And although it would have been possible for God to have created only such intelligences as, though they possessed the power of falling, yet, in point of fact, never would fall, nevertheless it pleased his inscrutable wisdom to create this present order of things, wherein, from among countless others equally possible, certain possible intelligences, which, in the notion of their possibility, or in the idea of them which exists in God, involve a certain series of free actions and divine helps — of faith, charity, eternal happiness, or the contrary — are selected, and admitted to existence, or created: — as, for instance, Adam, who was to be exiled from Paradise; Peter, prince of the apostles, to be a renegade, a confessor, and a martyr; Judas, a traitor, &c. And this, doubtless, because God knew how to convert this partial and particular evil, the occurrence of which He foresaw and permitted, into a good far greater than should have existed without this evil;

so that in the end, the present order should, as a whole, be more perfect than all others. Thus, for example, the fall of Adam was corrected, with an immeasurable gain of perfection, by the Incarnation of the Word, and the treason of Judas by the Redemption of the human race.

Hence when some of the angels fell, through an impulse, as it appears, of pride; and when afterwards the first man, under the seduction of the evil angel, fell through concupiscence; — for the former is a sin characteristic of the diabolical, the latter of the animal nature; — original sin invaded the human race in the person of our first parent; that is to say, a certain depraved quality was contracted, which, from the darkness of the intellect and the predominance of the senses which it induces, renders men slothful in the performance of good, and prompt in the commission of evil actions. And although the soul, as it emanates from God, (for the notion of a transmission of souls is unintelligible) is pure, yet, through the sin of our parents, it is corrupted by its very union with the body; in other words, by its connexion with external things, original sin, or a disposition to sin, is produced in the soul; although it is not possible to conceive any moment at which it was itself pure from stain, and was doomed to be imprisoned in an infected body. And thus were all made "*children of wrath,*" "*concluded under sin,*" and doomed to inevitable perdition, unless preserved by a great grace of God. We are not, however, to extend the effect of original sin so far as to hold that children who have committed no actual sin will be damned — an opinion which many maintain; for, under God, who is a just judge, no one can be condemned to misery without a fault of his own.

Actual sins are of two kinds; some venial, which must be expiated by temporal chastisement, others mortal, which merit eternal perdition. And this division of sin not only is an ancient one, but also appears perfectly consonant with the divine justice; nor can I commend the views of those, who, like the Stoics, regard all sins as almost equal, or all alike worthy of

the extreme punishment of eternal damnation. Now those sins appear specially to merit the name of mortal, which are committed with a perverse intention, and against the express dictate of conscience, and the principles of virtue implanted in the mind. For it would seem that those who depart from this life at enmity with God (as they are no longer recalled by external impressions of sense,) persevere in the course which they have commenced, and retain the state of mind in which they were surprised, and that, by this very fact, they are separated from God; whence, by a kind of consequence, they fall into the supreme misery of the soul, and thus become, so to speak, the instrument of their own damnation.

Now all men, being born in sin, and not as yet regenerated by the grace of the Holy Ghost, are wont, when they have attained the use of reason, to fall into mortal sins, at least unless they are withheld by some singular favour of God; for, by the voice of conscience, all are admonished of the distinction of good and evil, and yet are occasionally overcome by the passions. And consequently the whole human race would perish, had not God, from eternity, formed a design for its redemption or expiation, worthy of his mercy, as well as his unspeakable wisdom, which He executed in his own season.

For we must hold as a certain principle, that "God desireth not the death of the sinner," but "will have all men to be *saved;*" — not, it is true, with an absolute and irresistible will, but with a will ordered and limited by certain laws; — and consequently, that He assists each individual as far as is consistent with the order of his wisdom and justice.

The principles hitherto stated are almost all evident from the light of reason itself; but it is only from the revelation of God that we could have learnt what was the hidden economy of the Divine counsel in the restoration of the human race.

We must call to mind, therefore, that God is not only the First Substance, the Author and Preserver of all others, but that He is also the most perfect Intelligence; and that, in this relation, He is invested with a moral quality, and enters into a certain society with other intelligences, over all of whom, collected into a most perfect commonwealth, which we may call "the City of God," He presides, as a supreme monarch over his subjects.

God, therefore, not only acts by that general and hidden will by which He governs, according to certain fixed rules, the entire machine of the universe, and by which He concurs with all the actions of intelligent beings; but also, in his capacity of legislator, declares, and sanctions by rewards and punishments, his particular and public will with regard to the acts of intelligent beings and the government of his city; and for this purpose He has instituted revelations.

Now, revelation must be invested with certain notes (commonly called motives of credibility), from which it may appear, that what is contained therein and declared to us, is the will of God, not an illusion of the evil genius, or a false interpretation of our own; and if any revelation be destitute of these notes, we cannot embrace it with security: with this restriction, however, that sometimes, in a case of doubt, when the mandate in itself is not at variance with reason or with any previous revelation, and is supported by probable reasons, it is better to obey it than to expose ourselves to danger of sin. In this, however, we must be cautious lest fear should degenerate into superstition, and credit be given to every "old wives'" tale. For it would be unworthy the Divine Wisdom to omit a precaution which no prudent legislator neglects, that of notifying sufficiently the will of the lawgiver. Hence faith is not lightly to be given to lots, to visions, or to dreams, and not at all to auguries, omens, and such other trifles, which (under the notion that they are signs of the Divine counsel) we absurdly call divinations.

As right reason, therefore, is the natural interpreter of God, it is necessary that, before any other interpreters of God be recognised, reason should be able to pronounce upon their authority; but when they have once, so to speak, established their legitimate character, reason itself must thenceforward submit to faith. And this may be understood from the example of a governor who commands in a province or garrison as the representative of his prince; he will not lightly, nor without cautious scrutiny of his credentials, yield up his authority to the successor who may be sent to replace him, lest an enemy steal in under this guise. But the moment he recognises his master's will, he will at once, without dispute, submit himself and the entire garrison to the new authority.

Nevertheless, in addition to the evidences of human faith, or motives of credibility, there is further required a certain internal operation of the Holy Ghost, which invests it with the title of divine faith, and confirms the mind in the truth; and hence it is that faith may exist where there is not, and perhaps never has been, any advertence to these motives drawn from human reason; for it is not necessary at all times, nor for all persons, to enter into an analysis of faith, nor is every person equal to the difficulty of such an examination. The very nature of true faith, however, necessarily supposes that those who, in the fear of God, attentively examine the truth, should be able, when occasion requires, to institute an analysis of its motives; if it were not so, the Christian religion would have nothing to distinguish it from a false system, speciously adorned.

All the notes of divine revelation, with the exception of one — the excellence of the doctrine itself — may be resolved into that of confirmation by miracle, or by some wondrous and inimitable circumstance, or event, or coincidence, which it is impossible to ascribe to chance. For this is an especial sign that the admonition is from Providence. Now this is peculiarly the effect of prophecy; for to predict future events

accurately and circumstantially exceeds not only all human, but even all created powers. Hence we are bound to give credit both to the prophet himself and to the person whose coming is found to verify the conditions of the prophecy. So, also, if any one perform other wonderful and, humanly speaking, incredible works, we must recognise him as aided by a superhuman power.

Furthermore, if miracles of this character, though performed long since, be attested by those arguments by which, in other cases, the truth of historical facts is legitimately proved, we are bound to believe them, just as well as if they were performed to-day. For, even in the management of our human affairs, how many things do we admit as undoubted (and that with perfect propriety and prudence) which we have neither tested by our senses, nor are able to prove by demonstrative arguments! And, indeed, as St. Augustine well shews in his book *On the Utility of Believing*, most of our actions, even in the affairs of common life, rest on faith, and yet are not on that account less successful in their issue, or less prudent in their design. Nor can we hesitate to hold as certain, that the Providence which rules the universe will never permit falsehood to invest itself with all the distinctive badges of truth, and, so to speak, her official robes.

The brevity which we propose to ourselves does not permit our entering, in this place, into the evidences of the truth of the Christian religion. Many eminent men have already ably executed this task; as, for example, Origen, Arnobius, Lactantius, Eusebius, Cyril, Theodoret, St. Thomas in his work *Against the Gentiles;* and, more recently, Steuchus, Mornay, Grotius, Huet; and although we might be able to add much to what they have written (for the various evidences of truth are innumerable), yet we are far from seeking to detract from their merit.

The sacred monuments of Christians teach that the Supreme God (whose unity is established by the evidence of reason itself) is nevertheless three in

Persons, and consequently (a mystery which surpasses all reason) that, in one only God, there are three Persons of the Divinity; that these, to human comprehension, may very fitly be called the Father, the Son or Word, and the Holy Ghost; and that the Son is born of the Father, and the Holy Ghost proceeds, according to the Latins, from both the Father and the Son, or, according to the Greeks, from the Father through the Son (and that as from one principle).

This, however, must be understood so as to avoid all suspicion of Tritheism; and therefore, when it is said, "the Father is God, the Son is God, the Holy Ghost is God, and these three are different from one another" (so that the Father is not the Son or the Holy Ghost, nor the Son the Holy Ghost or the Father, nor the Holy Ghost the Father or the Son), it must be understood in the sense that nevertheless there are not three Gods, but only one God, though three in Persons.

The Anti-trinitarians, indeed, insist that this is a contradiction, and that the plural number has no other force but to express that the three Beings, distinct from one another, each of whom is God, are three Gods, and that things which are distinct in number cannot be one in number.

But they should reflect that the Church does not assert of the Father, for instance, or of the Son, that He is three in Persons, but that He is one Person of the Divinity; hence the multiplication of Persons does not involve the multiplication of God, three in Persons; nor, therefore, does the Trinity of Persons imply three Gods. Moreover, a person, generally, is a substance numerically one and incommunicable; and, in God, it essentially involves a relation, and, together with its correlates, constitutes an absolute substance numerically one. There are, therefore, three singular substances, and one absolute relation which embraces these, and whose undivided nature is communicated to each. Of this we may discover some faint resemblance in the operations of our own mind, considering and loving itself.

It was by this illustration, adapted to our comprehension, that the ancients were wont, and, in my opinion, judiciously, to explain this mystery, viz. by the analogy of the three chief faculties of the mind or requisites of action, namely, Power, Knowledge, and Will; Power being ascribed to the Father, as the source of the Divinity; Wisdom to the Son, as the Word of the mind; and Will or Love to the Holy Ghost: for, from the Virtue or Power of the Divine Essence spring Ideas of things, or Truths; these Wisdom embraces; and thus, in the end, they become, according to their several perfection, objects of the Will: an illustration which also explains the order of the Divine Persons.

As it had been decreed, therefore, in the eternal secrets of the Divine counsel, that one of the Persons of the Divinity should take upon Him the nature of the creature, and, in a peculiar manner, adapted to our comprehension, should govern, like a king, familiarly and openly, the city of God, or the commonwealth of intelligences, it pleased the only-begotten Son of the Father to take this office upon Himself, the Word of the Divine Mind already eminently containing in itself the ideas or natures of creatures.

And He assumed the nature of man, not alone because in man the superior and inferior natures meet, as if upon a common boundary, but also because there is no other more worthy means of attaining the expiation of the human race, which was the first care of God; and it seemed fitting that the Son made Man should Himself exemplify every virtue, and should triumph by perfect humility and patience, before man should be crowned with the incredible glory to which he is thus elevated.

We learn, therefore, from Divine revelation, that, when the pre-ordained time arrived, the Word, or only-begotten Son of God, assumed our entire human nature, consisting of soul and body; and that, while He sojourned on earth, He acted as man, in every thing except sin, from which He was exempt, and miracles, by which He shewed Himself to be greater than man.

And He was called Jesus, surnamed Christ, as being the Anointed of the Lord, or the King or Messiah, the Restorer of the human race long foretold by the oracles of the prophets.

The holy Fathers admirably illustrate the mystery of the Incarnation by the analogy of the union of soul and body: “for as soul and body is one man, so God and Man is one Christ.” The illustration, however, is imperfect, for the soul partakes in some things of the imperfections of the body, while the Divine Nature cannot admit imperfection. Still the words ‘person’ and ‘nature’ are very fitly applied; for as a plurality of Persons possess the one nature of the Divinity, so, on the other hand, one Person of the Divinity embraces a plurality of natures, the divine and human.

Nor do I see any reason for the abhorrence which many sectaries, both ancient and modern, exhibit for these opinions. For if one weigh the matter fairly, he will find that the doctrines of the Catholic Church on the Trinity and Incarnation are safe, and that those of her adversaries are replete with danger. Because the Church defines that only one absolute substance is to be adored, viz. the supreme, omniscient, and almighty God; and neither in the Word, nor in the Holy Ghost, nor in the man Jesus, does she honour with supreme adoration aught else than this one eternal Being.

The practice of the Church, therefore, is blameless, if it be but duly inculcated upon the people; nor does there appear any reason why we should regard as unworthy of God, either this internal undivided Trinity, or the external assumption of the human nature, which receives perfections from the Godhead, but does not return its own imperfections thereto.

Now the Arians, on the contrary, regard the Son of God merely as the first of creatures, and some of them under the name of the Holy Ghost understand the angels; and yet they scruple not to worship, with divine honours, what they thus regard as a creature. The Photinians, regarding Christ as a simple man, make Him an adoptive Son of God, and yet adore

this factitious and subordinate Deity — a doctrine which certainly appears to coincide with that of the Pagans; and, if their hypothesis be once admitted, Francis Davidis acted more consistently in denying all adoration to one whom he professed to be a mere man; although how slight the interval between this opinion and that of Mahomet himself!

With regard to the mode of the union of natures, many subtle questions are raised, which it would have been better to have left untouched; among others, that respecting the "communion of properties," namely, whether, and how far, the properties of one nature may be attributed to the other; as though it were necessary to decide this question. It is enough to know that the properties which are attributed to each nature separately may rightly be attributed to the concrete; for it is correct to say, that, in Christ, God suffered, man is omniscient and omnipotent; but to attribute to the humanity, in virtue of the union, omnipotence, ubiquity, and (what especially follows) eternity, is as incongruous, as to ascribe to the Divinity the having been born and suffered; a form of speech which is either an impropriety or a contradiction.

We must hold, however, that, by the union with the Word, all the perfection, knowledge, and power, which man, as man, is capable of receiving, have been imparted to the humanity in itself; and it is safer to affirm this regarding Christ, even in the state of exinanition; although in that state, as the body remained passible, the hidden glory only appeared, as it were, by a few rays, shining out through the night.

Christ, then, the Son of God and of man, born, without man's agency, of a Virgin Mother, and exempt from all sin, offered Himself to God the Father, a most worthy victim, for the expiation of the guilt of the human race; satisfied, by his perfect humility and his passion, for the sins of men; and therefore, as far as was in Him, died for all.

Nevertheless, it has pleased God to ordain as the law of man's redemption, that its benefit should extend to all who, having been born again in Christ by the grace of the Holy Ghost, should elicit a filial act of faith and love: for although a perpetual purity of mind and fervour of disposition towards God are, in the rigour of justice, always necessary, yet, through the equity of Divine grace, it has been effected by Christ, that, even in a person who falls after regeneration, every past sin shall be effaced by the sincere love of God, and (what is included therein) repentance for the past and a resolution of amendment.

In the course of the last century, certain angry controversies arose on the questions of the conversion of man, of the justification of the sinner, and of the merit of good works, occasioned by the inconvenient expressions of some of the disputants, and the excesses of others on the opposite side. In my opinion, however, they may easily be adjusted, if one will but discard the sophistry in which they have been involved, and consider the subject on its own merits.

In the first place, therefore, we must hold that, by the fall, human nature has been so thoroughly corrupted, that, without the aid of Divine grace, it is unable not alone to perform, but even to originate, any good work or any act agreeable to God. Without the aid, therefore, of *preventing* and *exciting* grace, we are not capable either of prayer, or of the wish or desire of amending our life or seeking the true faith, or, in general, of any good motion.

But, upon the other hand, we must also hold that man's free will is not destroyed by the fall, even in things divine and necessary for salvation; but that all voluntary acts (although they are excited by grace if they be good, and proceed from our corrupt nature if they be bad,) are, nevertheless, "spontaneous with election," and therefore free: — in the same way as it does not interfere with the liberty of our actions in common life, that we are

excited to these actions by rays of light which are transmitted through the agency of the eyes, and though the excitement is sometimes so powerful that, notwithstanding our deliberation, and the power which we still retain of resisting the impressions, it may yet be foreseen that the act will certainly follow; — for the certainty of an act is one thing, and its necessity another. And hence a sinful action is contingent, and the act of eliciting good motions is free. And although the impulse under which we act, and the aid which we receive, are from God, yet there is always some co-operation on man's part, else he could not be said to have acted.

The ulterior questions — as, whether, in the unregenerate, these powers of producing good motions are mutilated or only impeded, and what illustrations may best be employed to explain the aid afforded by grace — are very idle and profitless discussions, raised by those who exert all their ingenuity to discover, in the doctrines of the Church, matter at which to cavil, with any shew of reason, however trivial.

To all men God gives *sufficient grace?* in so far that, supposing only a serious will on their part, there is no further requisite for the attainment of salvation which it is not in their own power to secure. And hence many pious men have held it as certain, that "*every man who cometh into this world*" is so "*enlightened*" by the Light of Souls, the eternal Son of God, and by his Holy Spirit, that, at least before his death, provided he himself wills it, he may attain, either by external preaching or by internal enlightenment of the mind, to such knowledge as is sufficient and necessary for salvation; so that if, after this enlightenment, he obstinately resist the call of God, he may at least be rendered inexcusable; for this is necessary for the vindication of the Divine justice. But as to the means by which God effects this, even in the case of those to whom no suspicion of the Gospel of Christ has ever been conveyed by the external preaching of the word this is

a question which we may not venture hastily to decide, but must leave to his wisdom and mercy.

God, however, does not grant always, and to all men, that *efficacious* or *victorious grace* which actually produces the good-will, overcomes the inclinations of man, and outweighs the opposing solicitations of imperfect or corrupt nature; otherwise all men, without exception, would be saved. But the reason why this is not done, — that is, why, in preference to many others equally possible, certain persons are admitted into existence by God, although the notion or foreknowledge of them involves the idea of impenitence, and of other free actions incompatible with salvation, and of certain degrees of divine grace inferior to the crowning and victorious grace, — belongs to the mysteries of God's government, inaccessible to mortals; and on such questions we must rest satisfied with this one principle, that whatever has pleased God is best; that in no other order could the perfection of things be better attained; and that, as we have already observed, the evils which God permits are always converted into a much greater good.

Nevertheless, we are not to imagine that the Divine will for men's salvation, or the merits of Christ, or, at least, efficacious grace, are confined solely to the elect — that is, to those to whom the crowning and final grace of blessed perseverance is vouchsafed. For Christ died for all; and efficacious grace, and that true conversion and regeneration through the Spirit of God, whereby we are received into the number of his children, may be granted to many who will not persevere. Nor do I see how certain learned men can have been betrayed into such monstrous paradoxes, revolting both in their intrinsic meaning and in their consequences, as, (fixing a law, as it were, for God, and circumscribing according to their caprice the economy of Divine grace,) to imagine that a person who is not to persevere does not really receive grace, and is not really regenerated by

the Holy Ghost, no matter what works he may perform, no matter how pious and well-disposed he may appear to himself and to others; and on the contrary, that a person who is truly elect, and destined to final penitence, never forfeits the grace once received from God, and the indwelling of the Holy Ghost, even though he should spend his whole life in a series of adulteries and murders. Indeed, even though it were possible to excuse these novel and offensive dogmas, I do not see on what foundation they rest, or what purpose of edification they can serve. For, if expressions occasionally occur which would appear to favour this revolting opinion, it is better to soften them down by comparison with others far more numerous, than to add to their harshness by a rigorous interpretation. And it seems more consonant with the attributes of God to grant a temporary and revocable, but visible, grace, than a grace perpetual and inadmissible, but utterly hidden, and compatible with the most depraved habit of soul and the most heinous crimes.

When man, therefore, by God's preventing grace, is aroused from the deadly sleep of sin to a knowledge of his misery, a spirit of self-examination, and a firm resolve of seeking and following the saving truth; and when, rejecting or disregarding all other thoughts and affections, and all worldly or carnal maxims, he devotes his whole energies to the care of salvation; he perceives, even from the light of nature, what is the law and the will of God; and, admonished by memory, he acknowledges with groans and trembling how far he has strayed therefrom, what grievous punishment he has merited, and how heinously he has offended his Creator, to whom he owed supreme honour and love. Pursuing this consideration, he elicits from amid the terrors of conscience the light of returning hope; for he discovers that the same most just Judge, in his infinite mercy, still takes pity upon human weakness, and that He has not laid aside his good-will towards sinners, provided, while there is yet time, they seek a refuge in his mercy.

And thus as, to all who seriously turn to God, the Gospel holds forth Christ as the haven of salvation, which all may reach by true penitence — (and penitence, in order to be sufficient, must proceed, not from fear of punishment or hope of reward alone, but from sincere love of God) — whether it be the penitence of those who are received for the first time into the Church of God, as in the baptism of adults, or of those who, having been again imperilled in the gulf of sin, betake themselves anew to penance, as to a second plank after shipwreck; — and as God promises to those who turn to Him and do penance, not only pardon of past sins, but also new strength for a better life, and the Holy Ghost and regeneration; — hence follows the justification of the sinner; whereby he is not only absolved from guilt, through the satisfaction of Christ laid hold on by faith, but also, by the infusion of the charity of Divine love, is invested with the habit of justice and the new man.

Now, as these principles are certain and almost universally admitted, it seems to me very idle to enter into the controversies which have been raised by certain writers concerning the form of justification, viz. whether it consists in the imputation of the merit and satisfaction of Christ, or in habitual infused justice. For as all are compelled to admit that both are necessary, where is the need for further discussion? and where shall we find a dispute about words, if this be not such? If justification be taken, as it is usually taken by jurists, to mean freedom from imputability, it is manifest that the essence of our justification, that is, of our innocence, consists in the imputation of Christ's satisfaction to us, in virtue whereof pardon is granted to those who believe, and do penance. But if justification be understood, as in ethics, to mean, the being invested with the habit of justice — as it is said in the Apocalypse: "He that is just, let him he justified still — that is, "let his habit of justice increase;" — it is evident that this habit of justice is infused into us by God in the act of regeneration, when we put on the new

man. Whence it may not inaptly be said that the gift of penance and of pardon (not to speak of the other favours, by which God assists and prevents us, even before the work of regeneration is complete,) is a "grace given gratuitously whereas the infusion of the new habit is a grace given to penitents in virtue of an institution congruous to the Divine wisdom— "a grace which renders us grateful and pleasing" to God, which really operates a conversion of our mind, and crowns the whole work of our regeneration. But, however this may be, we must hold, that to the notion of justification, even considered as consisting in the remission of imputability, not faith only, but also penance, and therefore charity, is necessary.

Equally profitless is it to contrast the two divine virtues, faith and charity, with one another, to raise, as it were, a question of precedence between them, and to discuss anxiously which of them has the principal share in justification. For in the same way as it is certain that faith without charity is dead, so also is it certain that charity without faith (love without knowledge) is of no effect. And hence faith is an essential of charity, charity a complement of faith.

And indeed some of those who attribute justification entirely and exclusively to faith, and maintain that the other virtues will indubitably follow as fruits of justification by faith, seem to adopt a notion of faith different from that which has heretofore been received in the schools; for they refer faith not only to the intellect, but also to the will; nay, they extend their notion of the idea of faith so far as to make it comprise filial confidence in God, which seems to me to involve charity or the love of God. It is not wonderful, therefore, that they hold men to be justified by faith alone, whereas under faith they comprise hope and charity; and therefore, if they think so, the question becomes a mere dispute of words.

It must be admitted, indeed, that, even according to the received notions, faith, or assent, partakes, in a certain sense, of the will; for, were it

otherwise, the act could not be commanded by God, nor elicited by men in obedience to the command, though they desired to do so. And, in truth, we often see men hold a thing as true, although they are not able to assign, nay perhaps never have been conscious of, any reason for their opinion; and this is the nature of the faith which, as we have said above, is excited by God in the minds even of simple people who do not inquire into the reasons of their belief; so that, in truth, this unreasoning assent consists in that state of mind which produces in those who are under its influence the same dispositions, and prepares them to act and to suffer as efficaciously as the persons who are conscious of motives for their belief, and sometimes more efficaciously. The matter may be understood from an illustration: We know that there are persons who, as far as arguments go, are satisfied that they will never meet ghosts in the dark, and who, nevertheless, will not venture to walk alone at night, or, if they do, are seized with a kind of panic fear. On the contrary, there are others who never even think of arguments against the fear of ghosts, and who, notwithstanding, secured by the firm faith and conviction which they possess, fearlessly spend whole nights alone in the woods and in the dens of wild beasts. Thus, in the case of the former, there seems to be a kind of speculative opinion, in that of the latter, rather a practical assent — a quality which undoubtedly is especially required in faith. And Christ himself has said that there are many degrees of faith; and the highest of these are to be derived, not so much from the mere intellect (otherwise those whose learning was greater would have the greater faith, which certainly was not true of the Canaanite woman, or of the centurion of Capharnaum, though Christ himself attributed great faith to them), as from the affection of the mind, and its readiness to embrace the doctrine when imparted, although reason should appear not only not to favour it, but even to be at variance with it. However, faith, or practical assent to the articles of the Christian religion as a whole, may be altogether distinguished from

hope and charity, and from the filial confidence by which we apply general doctrines specially to ourselves.

Nor are we to imagine, as some have done, that, in order to justification, it is required that a man should believe with divine faith that he is justified, much less that he is elect and secure of persevering; for, as there are many who have true faith, and yet will not persevere, it would follow that these persons were bound, by virtue of the faith which is necessary to justification, to believe what is false. But, besides, those who require in the person who is justified a previous belief of his own justification, involve themselves in contradictions. For, if the belief of one's justification is required for justification, and therefore precedes it, it follows that a man who is not yet justified must believe that he is justified, and, therefore, that he must believe what is false. And if they content themselves with requiring from him a belief that he certainly will be justified, they escape these contradictions, it is true, but, on the other hand, they arbitrarily invent conditions of justification which are entirely without any warrant either of reason or of Scripture. For if a man possess faith and charity, he will also have the grace of justification, though he should not even advert to the reflex act, whether he receives it or not. Nor does this filial confidence, or the hope by which we believe and trust that our sins are remitted, and that we are received into favour and made children of God, belong to that divine faith in the general promises and infallible revelations of God; because this confidence has for its object not alone the contemplation of the Divine goodness, but also individual human things regarding matters of fact; and it springs from the consideration and memory of things which pass in our mind; and consequently does not rise beyond moral certainty. Should any doubts, therefore, arise from the consciousness of our own infirmity, they do not destroy this filial confidence; in the same way as temptations of doubt regarding the articles of religion do not destroy the substance of faith,

even though it be languid. It is our duty, however, to struggle against these doubts; for, if we but fix our thoughts firmly upon God's goodness, we must conclude that He will never suffer those who "thirst after truth," and seek grace, to be deceived by falsehood to their own destruction, or to fail of obtaining mercy.

That charity, or love, which is a divine virtue, consists in our loving God above all things, and seeking in Him our sovereign good; and, therefore, we are to love Him, not only for the benefits which He bestows on us, but also for Himself, and as our last end. For, in general, it is of the nature of that true love which is called "the love of friendship," to place our happiness and perfection in the perfection or happiness of the beloved object; in part, if the object be of finite perfection (as when we love children or friends), but entirely, if it be of supreme excellence and goodness.

Hope, as used by theologians, is that love which is called "a love of concupiscence," or an affection towards God, springing from the consideration, not of God's excellence and perfection, but of his beneficence towards ourselves, and of the great benefits which He promises to his servants, and especially that of eternal life; — although it may be that the consideration of God's benefits may also manifest his perfection to us; in which case hope is elevated into charity.

And as the evidence of reason and of Scripture assures us that true and perfect charity is not only prescribed by God, but is moreover the highest service which man can render to his God, and that without it *faith is dead,* therefore has it been justly and congruously ordained that through it our justification, reconciliation, and renovation are completed; although the actual grace of charity is obtained for us, and granted to us, solely through Christ, while we are still separated from God; and although its power of effacing sin springs solely from Christ's merit, imputed to us through a lively faith. For, as we have already said, in the rigour of Divine justice it

would not suffice for the pardon of past sin to love once, but it would be necessary to have always maintained these good dispositions. But, seeing that Christ has satisfied for us, the conditions which God requires in order that we be made sharers of Christ's merit are easy of fulfilment; for it is not possible, consistently with the order of the Divine justice and wisdom, to understand or imagine any condition more easy of fulfilment, than that of the love of God himself, the most amiable and fairest of all conceivable objects, which is the sole condition required of us by Him, after Christ's satisfaction, as the price of the restoration of his friendship, — a price in itself utterly inadequate.

And whereas in those to whom God's abiding grace has been vouchsafed through Christ, there is no longer any sin, any thing hateful to God, "*any condemnation*" it appears inconsistent with the form of sound words to say that original sin remains after regeneration, though it is weakened or is not imputed; and we shall consult more for the propriety of language if we say, that what constitutes in the original evil the distinctive character of sin, is effaced in regeneration through the merits of Christ and the efficacy of the Holy Spirit; although the flame of corrupt nature is not entirely extinguished; and although, from the infirmity of human nature, even the just are occasionally betrayed into venial errors.

The question then arises, what it is in original sin that possesses the distinctive character of sin? for neither the sole privation of original justice, nor the positive stain of our nature which always clings to us, constitutes the distinctive character of sin. There are some Catholic divines, therefore, who hold that, in original sin, what constitutes the form of sin, is nothing else than the imputation of the crime committed by Adam, or simply the imputability itself; others acknowledge in it nothing, at least nothing positive, in which the nature of sin can be placed, and seek it altogether in the defect of original justice; they conceive, however, that there is

something more than this, which they explain by an illustration. It is certain that the intention, like every other act of the mind, is of two kinds — virtual and actual; a virtual intention, such as they contemplate, is sometimes found in a person baptising, or administering any other sacrament; for the intention, provided it existed in the beginning, is supposed to endure throughout the entire time of the, act, although the mind may not always advert to what it is doing, or, perhaps, may even be carried away by other thoughts, during the entire action, without ever reverting to the act in which it is engaged. Hence it may be said that the condition of those who are affected by original sin is somewhat similar; and we may conceive that all men have, in some hidden way, sinned in Adam, and that, as their will has been depraved by Adam's sin, they have always retained, until the restoration of grace, something analogous to a virtual intention of sinning, which, before regeneration, prevails over even their good motions, or, at least, mingles itself with them. It must be understood, however, at the same time, that this virtual evil intention is removed by true penance along with the guilt; and that the only effect which remains is the concupiscence of the flesh rebelling against the spirit.

We must be careful however, not to underrate the evil influence of original sin, as though the natural powers which existed before the fall are not much lessened and depraved thereby; lest, having been delivered from it, we should detract from the favour which God has thus bestowed on us; nor should we think lightly of the relics of it which still cling to us, as though they were trifling and easily overcome, lest perchance we be betrayed into undue arrogance.

But neither should we, on the other hand, so far exaggerate its evil effects, as to say that no good whatever is left, and that every act of the unregenerate is of itself a sin; for St. Augustine (Ep. 130) admits that the continence of Polemon was a gift of God; now, who would assert that to be

a sin, which is given by God? Nor, again, are to imagine that original sin has struck its roots so deeply, as not to give way even to Divine grace and to the cleansing and sanctifying blood of the Saviour; as though even that involuntary concupiscence which, from the very composition of the human machine as at present constituted, remains even in the pious, is to be regarded as a sin; whereas no involuntary act can ever be a sin; and it is wrong to pervert the true notions of things, under pretence of a mistaken interpretation of Scripture.

Let us now examine what are the fruits of regeneration, in what manner good works arise therefrom, and what is the efficacy of such works. We have already said that, before regeneration, the love of God is necessary for the performance of that penance which is available for salvation; that from this penance, through the merit of Christ apprehended by faith, follows pardon of sin and renovation of the entire man, or the virtue of Divine charity; and that (although the habits of the other virtues are acquired only by repeated acts) this virtue, through the mercy of God, is infused on account of a single act of love. Now this habit is essentially active; for by its very nature it is constantly endeavouring to burst forth into action, seeking opportunities of acting, and turning them to a profitable account. It may be safely asserted, therefore, that good works, as far as they consist in a serious will, are necessary to salvation; for a man who does not love God is neither a friend of God nor in the state of grace, because both penance and the renovation of man involve a contradiction, unless they are accompanied by love. Now all good works are, according to the received phrase, virtually contained in this right intention and sincere affection towards God; and this is the "*one thing necessary*," which Christ admonished us should be preferred to all else beside.

Whosoever, therefore, loves God above all things, acquiesces, as I have already observed, in his will as regards the past, even though he should

seem to be deserted, and should find himself condemned to struggle with many adversities; being firmly persuaded that God is good and faithful, that He tenderly loves “men of good will,” and that He disposes all things so as to turn, in the end, to the good of those who love Him. And, as regards the future, he endeavours with all possible fervour to obey the commands of God, not alone those which are expressly revealed, but also those which are presumed from the consideration of the Divine glory or of the public good. And in cases of doubt he chooses the part which is safer, more probable, and more advantageous; in the same way as an active, industrious, and zealous minister would act, if entrusted by a great prince with the management of his affairs. For there is no greater or better master than God; none to whose exclusive service all our powers may more rightfully be devoted.

From the love of God springs the love of our brother; that is to say, of every man with whom we may in any way be brought into connexion. And the idleness and insincerity of professions of the love of God in one who loves not his brother, are admirably inculcated by John, of whom it is related by Jerome, that in his extreme old age, when carried in the arms of his disciples to the church, he used to confine himself to one single exhortation, “My little children, love one another!” — and that when, at last, some one, wearied by the unvarying repetition, asked why he always inculcated this precept, and this alone, he replied by a sentiment truly worthy of John: “Because,” said he, “it is our Lord’s command, and its observance is alone sufficient.” Now Christ himself has prescribed an admirable rule of fraternal love, and one which even the Gentiles warmly applauded, viz. “that we love our neighbour as ourselves, and therefore that we do, or refrain from doing, to others, what we would, or would not, that others should do to us.” But, although there is no doubt that “charity begins at home,” and that, as regards others, this all-embracing and universal

benevolence should make us select as its object that person on whom the conferring the benefit will be productive of the greatest advantage to the glory of God and the common good, yet it is right, notwithstanding, to prefer the salvation, the life, or any other great advantage, even of a stranger, to an inconsiderable inconvenience of ourselves or others.

Good works, then, are those which are undertaken with a right intention for the glory of God and the public good. Under this class, therefore, are comprised the following: that each one should pursue his own calling — that is, apply himself to those duties for the successful discharge of which the talents and opportunities granted him by God appear to qualify him; that, in the next place, he should acquit himself accurately of the obligations of the public office or station in life which he has embraced, and labour to perfect the sphere which has been assigned to him; that, in his other relations, he should discharge towards all men the common offices of humanity; that he should not abandon, unless compelled by necessity, any one who is in peril, and whom it is in his power to assist; and that, even where his assistance is solicited in advancing the mere convenience of another, he should not withhold it, provided the advantage which is sought is not prejudicial to himself or others. And in general he should direct his thoughts so as to procure the greatest amount of good, and for the greatest possible number; and should seek, in all things, to advance the glory of God. The first care of the truly pious man, therefore, will be to be frugal of time, lest he should spend any portion of his life unprofitably; and he will abstain, as far as possible, even from allowable recreations; unless when, from his position in active life, he is drawn into places of public report, either by the necessary relaxation of mind and the care of health, or by the contingencies of business, or the decorous observances of society. For the austerity which would perpetually exclude every one from feasts, shows, games, dances, and the other amusements and exercises of courts, is no part

of true piety: for these relaxations, in some cases, are not a waste of time, but useful instruments of business. It is right, however, that they should be indulged with discretion. And the virtuous man will shew by his conduct that they are but of secondary interest in his eyes, and that it is only through some necessity he is induced to take part in them.

And as there are various ways, according to the condition and disposition of each individual, of advancing the glory of God and the welfare of men, either by actual service or by example, it is manifestly a source of great advantage that there should be in the Church a class distinct from those who are engaged in the active occupations and duties of every-day life — a class of ascetic and contemplative men, who, discarding the cares, and triumphing over the pleasures, of life, devote themselves entirely to the contemplation of the Deity, and the admiration of his works; or who, divesting themselves of all personal concerns, attend exclusively, and apply all their energies, to the relief of the necessities of others, either by instructing the ignorant and erring, or by succouring the needy and distressed. Nor is it among the least of the reasons which commend that Church which alone has retained the name and badges of Catholic, that it is in her alone we see universally exhibited and encouraged eminent examples of the exalted virtues and of the ascetic life.

I confess, therefore, that I have always warmly approved of religious orders, of pious confraternities and associations, and similar praiseworthy institutions. For, provided they are purified from corruptions and abuses, governed according to the institutes of their founders, and regulated by the sovereign Pontiff for the interest of the entire Church, they seem to be, as it were, an army of heaven upon earth. For what can be more glorious than to carry the light of truth to distant nations, across the seas, and through fire and sword; to know no traffic but in the salvation of souls alone; to renounce every allurement of pleasure, even the enjoyment of conversation

and of society, in order to give oneself to the contemplation of abstract truths, and to meditation on the things of God; to dedicate oneself to the training up of youth to learning and virtue; to carry relief and assistance to the wretched, the despairing, the abandoned, the captive, the condemned, in squalidness, in chains, in distant lands; and not to be deterred, even by the fear of pestilence, from these offices of prodigal charity! The man who knows not, or despises, these things, has but a plebeian and vulgar conception of virtue; he foolishly limits man's obligations to God by the perfunctory discharge of every-day duties, and by that cold habit of life, without zeal, without spirit, by which men's minds are commonly regulated. Whereas it is not a mere counsel, as some persuade themselves, but a precept, that every man, in every state of life, should strive, with all the powers of soul and body, towards Christian perfection; the practice of which perfection is not incompatible either with wedlock, or with the care of children, or with the occupations of office or of military life, though all these states increase the obstacles to its attainment. But the counsel is, to choose that state of life which is more free from earthly impediments; the choice on which our Lord congratulated Magdalen.

From the description of good works, however, let us come to their effect; and in the discussion of this question I find that their meritoriousness is commonly disputed, and that the opinion which for so many ages had been received in the Church is grievously misrepresented, as being full of pharisaical presumption and pride. I think, however, that if the terms be rightly explained, no ground of censure will remain.

We must bear in mind, therefore, that it is only by a certain analogy that the ideas of obligation and right are applied to us, in relation to God. For all things belong to God, because He created them, He preserves them, and He alone can wisely govern them. By virtue, therefore, of his supreme perfection, or of his supreme wisdom and power, God is naturally the Lord

of all; and we are but servants, to whom, in order that we may trade thereon, He has given a certain portion, which Christ called "a talent." Now, between the servant and the master there arises, with regard to this portion, merely an imaginary right, drawn from the master's own kindness and condescension. In the same way — to employ another illustration — as while a master plays at chess with his slave, every one knows that whatever is won or lost is the master's; but yet a sensible master will not derange the rules of the game by an ill-timed display of his authority. This explanation being pre-supposed and understood, we may speak securely, and without fear of censure, of an "as-if-obligation" on the part of God, and a right, or "*as-if-right*," on our own part.

Furthermore, as a right taken strictly is twofold; viz. a complete right, which gives an action, such as the right which arises from a contract; and an incomplete right, which produces an obligation, but gives no action of recovery, such as the right of the pauper to the alms which the rich man is bound to give him; so also our "as-if-right," which produces an "as-if-obligation" in God, is twofold, viz. either "a right of congruity," or "a right of condignness;" for it is congruous to God's justice to reward those who love Him with eternal happiness; — not indeed that it is so absolutely, and from the sole consideration of justice (if we abstract from a promise), for a less retribution than this would suffice, but from the further consideration of his wisdom, inasmuch as He has decreed to diffuse throughout his kingdom the greatest amount of happiness of which it may be susceptible; for, this decree of his wisdom once being supposed, it belongs to distributive justice that, of those who love God, not merely some individuals, selected, as it were, with an acception of persons, but all, without any exception, should be admitted to eternal felicity.

God, however, has Himself undertaken a greater obligation, from which it appears to me that we may derive even merit of condignness, and from

which, according to the laws of commutative justice, a more complete right arises in our favour. For God has entered into a contract with his Son, and, through the merits of Christ, we have been admitted into the same treaty. Now, the nature of this compact is, that, in virtue of Christ's satisfaction and of our incorporation with Christ, and our reconciliation with God through faith and penance, not only are our sins effaced, but we are moreover made heirs of eternal life, and receive a title, provided we run and fight legitimately, to the crown of justice, and to the many and rich rewards, by which the elect themselves shall be distinguished one from another; for not even "*a draught of cold water*" given to the poor "*shall go without reward*," since God, in virtue of the contract, crowns in us what is purely his own gift. Were it otherwise, we should be but "unprofitable servants," who have done only what we were bound to do; nor could we allege any merit, or claim any reward.

A further question has been raised, whether the regenerate can, with the aid of Divine grace, fulfil the law of God so perfectly as not to commit any mortal sin to which, of its own nature, eternal death is due. With reference to this question, as we must firmly hold that no wise legislator will prescribe impossibilities, we must also hold as certain, that to a man who has been reconciled with God, there is never wanting sufficient assistance on God's part, and that he always possesses a power of fulfilling, provided he will it himself, not only each, but all, the precepts of the Divine law. For Christ has declared that "*his yoke is sweet and his burden light;*" and the possibility of fulfilling the law follows clearly from the fact, that the whole law requires on our part nothing more than seriously and sincerely to exert our will, and to love God with all our strength; nor do I see what there is that should render this love impossible to us, whereas even the innate idea which we have of God leads us to acknowledge his infinite loveliness; and

the imperfection and unworthiness of all other objects are easily discovered by those who examine them.

It must be confessed, however, that, amid the weakness and rebellion of the flesh and the manifold distractions which surround us, it is difficult always to preserve purity of mind; and that, in consequence, few individuals have lived exempt from mortal, and none from venial, errors. And indeed, were God to enter into judgment even with one who, after regeneration, had lived exempt from mortal sin, even such a man would have no defence against its rigour except in the satisfaction of Christ; for at the least, it was in consideration of this satisfaction that he received pardon of his past sins in the first instance; and if, since that pardon, he has lived a holy life, to what else does he owe it but to the Divine assistance, for which he is indebted to the merits of Christ? Hence no one should "*glory save in the Lord*," with whom "*we can do all things*" and whose power is strong in the weak.

Having explained the reconciliation and renovation of man, and the fruits of the new life (which are the good works prescribed, by the law of God), it remains to consider the positive enactments which Christ has instituted and prescribed, in addition to the common, natural, and perpetual law of God.

We must recollect, therefore, that Christ is not only our Mediator, who by his merit and his passion has atoned for us and reconciled us to God, but also our Legislator, who, in virtue of the "all power given to Him in heaven and on earth," has prescribed certain laws which cannot be despised without peril of salvation, while their observance will avail very much thereto. To this number, however, do not belong, as some persons imagine, the precept of bearing injuries, of loving our enemies, and other duties of the same kind. For the love of enemies had been long before prescribed by the moral law. Nor does this precept forbid us to repress and punish the wicked, and to take such measures as may either ensure their correction, or, at least, may

deprive them of the power of injuring; on the contrary, indeed, even charity to others prescribes this; and though we ought to love all, not even our enemies excepted, yet, in a case of conflicting interests, we should observe a certain proportion in dispensing our benefits. Hence the passage in which it is said that we should bear with injuries, is to be regarded either as a counsel for those who select a life of seclusion and of special perfection and patience; or it signifies that we are not to resist a magistrate, even though he be a bad one; or it merely prohibits a desire of revenge, so that whatever is done against the wicked may be understood to be done solely from a motive of charity. The principles, therefore, of the Anabaptists, who interdict every pious man from public office and from military service, are grievously erroneous, and calculated to upturn human society; for who does not see that, if this principle were admitted, the service of the state would be deserted by good men, and that the supreme power would be thrown into the hands of its most abandoned members?

The institutions of Christ in his character of Legislator consist in the mode of Divine worship which is peculiar to Christians, and the Sacraments of the new law. Of the Sacraments we shall speak hereafter.

The distinctive character of Divine worship among Christians consists in our adoring in Christ-Man the almighty and eternal God, in our invoking Christ as the Mediator of salvation, and offering to God himself a perpetual Sacrifice of propitiation, viz. the Body and Blood of the Lord under the appearance of bread and wine, according to the order of Melchisedec, who prefigured Christ, the eternal Priest (the discussion of which subject we shall defer till we shall be considering the question of the Eucharist). To these may be subjoined the ceremonial observances which the Church has added for the sake of order and decency, and the practices connected with the veneration of the images and relics of saints, which partake somewhat of the nature of religious worship, and which, if freed from superstition and

abuse, are not without their utility. Of these we shall proceed to speak under distinct heads.

As regards the worship of our Saviour, Paul has expressly declared that "*in the name of Jesus*" all men, and in all places, "*should bend the knee;*" whence all Christians, not even excepting Socinians, agree that Christ is to be adored. Now the Catholic Church rightly teaches that, unless Christ were God, He could not be adored without idolatry; nor are Divine honours due to Him at all, except on account of the Divinity. For the sentence of the all-powerful and jealous God is fixed and unalterable: "*I will not give my glory to another*." Hence I cannot assent to the opinion of those who think that the right of Divine honour has been communicated to Christ's Humanity in itself; an opinion defended not only by Socinians, but what is more surprising, by others also, misled by their principles regarding the "communication of properties." Catholic teachers, however, with much more propriety, define that, although the highest perfection and the highest honour of which a creature is susceptible have been communicated to the Humanity by the Divinity, yet to the former, considered in itself, neither the properties nor the honours of the Divinity belong.

And this principle should be carefully observed, even for the sake of its practical bearing, lest, from the consideration of the supreme and eternal Good, men's minds may be withdrawn to the worship of man; and the Jews and Mahometans may thus be confirmed in the false opinion which they have conceived regarding us, as if we adored aught else but the one Almighty God. It was this false belief that gave rise to the fable, that the God of the Christians was given in pledge in the Host to one of the Sultans of Egypt; and to the bitter sarcasm of the Arabian philosopher, who declared, that "he had seen and heard of many ridiculous religions, but none more silly than the Christian, which commanded that its God should be

eaten;" — a calumny which arose either from their hatred, or from the imprudence of members of our own religion.

Nor can we regard the imperfect information of the people on this point, arising from the negligence of their teachers, as free from positive danger. For as the highest act of piety is that of the love of God above all things, derived from the consideration of the perfection, goodness, and loveliness of his Divinity, in the possession of which the chief happiness of the soul consists, it is necessary to beware, lest, while we think we are eliciting an act of contrition and of Divine love, we stop short of this act, and rest our thoughts in the love and veneration of Christ's Humanity alone; for although, in exciting the soul to increased fervour in acknowledging the Divine wisdom, justice, and goodness, as they are manifested in Christ, the consideration of his Humanity is more efficacious than that of all other creatures beside, yet it should hold the place but of a step, and not the highest and crowning point, in the worship of God. And yet this is a fault into which we commonly see preachers and writers fall, rather labouring in their words or writings to inflame the devotion of the people, by pandering to the imagination and to a certain sensual affection of the carnal mind, than seeking to inculcate the adoration of the invisible Deity, which consists "in spirit and in truth" and is the last and highest object of our worship. However, as the whole Christ, God and Man, is the object of adoration, there is no doubt that both his most holy Soul and his most sacred Body are adored, not in themselves, but in virtue of their union with the Divinity, and in so far as the honour paid to them is resolved into that of the Divinity. And, to sum up in a few words, as it is the person which is thus honoured, the act of adoration is directed to the Person of Christ; nor are we to imagine two adorations, but one only, which is directed to the whole Lord, the ultimate reason of which, however, is to be deduced from the Divine Nature. And hence it was that the Council of Ephesus (chap. 8) decreed that

Emmanuel “should be venerated with one supplication, and that one glory should be rendered to Him.”

Nevertheless, I do not agree with those who, forgetful of human weakness, reject, under pretence of the “*adoration in spirit and in truth,*” every thing that strikes the senses and excites the imagination. For every one who seriously considers the nature of our mind as it exists in this body, will easily admit that, although we can form, within the mind, ideas of things which are outside of the sphere of sense, yet we are unable, notwithstanding, to fix our thoughts upon them, and to dwell on them with attention, unless there be superadded to the internal idea certain sensible signs, such as words, characters, representations, likenesses, examples, associations, or effects. The utility of these notes and memorials is proportioned to their greater significancy, and their greater power of representing the properties of the thing which they are intended to denote, especially if they be prominent and striking; — and it is even of advantage if they be of their own nature pleasing. They should be divested, however, of all superfluous ornaments, and of every thing which distracts rather than assists the mind. All these principles may be illustrated by the example of a manuscript, and they are equally applicable to the style of the author, and to the character of the scribe. Thus, in addition to an accurate exposition and delineation of his subject, an author may employ, not without advantage and credit, similes, examples, apothegms, nay even musical construction and harmonious cadence: but, on the contrary, bombastic expressions, pedantic words, elaborate rhythmical arrangement, every species of affectation, and, in a word, every thing that does not soothe with insensible pleasure, but turns the mind away from the consideration of the subject to the examination of these secondary things themselves, — all such things are unworthy of an orator who seeks to persuade the hearers or readers, and are only suited to the unsubstantial rhetorician, who declaims idly in the school

to please the ear, and whose praise is not effective speaking, but a skilful display of figures. So also, from a scribe or a printer we look for clean and elegant paper, enduring ink, letters distinct, well turned, and flowing with a certain appearance of ease; but we do not desire figured paper, particoloured inks, and fantastic mazes of idle flourishes, running every where through the page; for all these things disturb and distract the reader. It is the same in sacred things: whatever leads the mind most effectually to the consideration of God's greatness and goodness, whatever excites our attention, produces pious thoughts, nay, whatever renders devotion sweet and grateful, all this is deserving of approval: but if the speaker betray excessive labour; if the hearers be carried away rather to admire his purity of diction, his elegance of gesture, and his erudition, than to love God, to confess their sins, and to amend their life; if it be the orator, rather than Christ, that is presented to the mind; if theatrical display take the place of the beauty of holy things; if the sacred music be designed rather to please the ears than to excite pious desires, — all this is to corrupt sincere devotion by profane ornaments.

Hence I am of opinion that God does not disregard, as unworthy of his service, the use of musical instruments, nor vocal harmony, nor beautiful hymns, nor sacred eloquence, nor lights, nor incense, nor precious vestments, jewelled vases, or other offerings; nor statues or graven images of pious objects; nor the laws of architecture and perspective, nor public processions, the chiming of bells, the strewing the streets with carpets, and the other expedients which the overflowing piety of the people has devised for the Divine honour, and which certain people, in their morose simplicity, despise. And this may be proved by arguments, as well as by examples. For the first fruits, and, so to speak, the choicest flowers, of all things and of all arts are due to God. Of old, even in the very infancy of the art, it was believed, as it must even still be acknowledged, that poetry (which is but a more divine species of eloquence, and, as it were, a language of angels,)

could not be more nobly employed than in singing hymns, and in celebrating the praises of God with all the elegance of which it was susceptible. We must admit the same of music — the twin-sister of poetry; nor can the most eminent architects more suitably display their art, or the mightiest princes their magnificence, than in constructing and procuring the construction of temples or basilics, and other works destined to the honour of God and the purposes of piety. In the Holy Scripture we have the example of God himself; for it was in obedience to his commands that Moses constructed the tabernacle, and Solomon the temple; and we read that David employed choirs, hymns, organs, and cymbals, in the praises of God. And although there is no temple more worthy of God than a pure mind, no music sweeter than fervent prayer, no incense more grateful than the odour of sanctity, no offering more noble than alms-deeds; and although "well-ordered justice and righteousness of soul" are commended, even by a profane writer, as more precious than gold in religious worship; yet we are not to overlook external things, because they are less to be prized than internal; in the same way as our innate reason directs us to respect and honour friends and princes, not only by real service and by acts, but also by words, by gestures, and by every indication of love and honour. And our Lord rebuked those who were indignant because the vessel of precious unguent was poured out in his honour, as though the price had been more fitly turned to the uses of the poor. For God has given to mortals abundant means of satisfying both offices; and by the wise discipline of pious antiquity, it was ordained that of that portion of the sacred revenues which remained after the support of the clergy, part should be applied to the poor and to works of charity, and part to the erection of basilics, and other expenses of a similar nature.

The question regarding the worship of images, viz. how far it is lawful to use them in religion, and, through them, to render honour to the prototype,

is of greater importance. For it certainly cannot be supposed that God would, without grave reason, have interdicted to his people all use of graven things, and have prohibited the making of images lest they might be used as idols. The ancient Church also, in the first ages, as we learn from the Council of Elvira and from other passages of the ancients, did not admit images into the oratories, or at least not without great difficulty. At a later period, the bishops of Gaul and Germany, in the Council of Frankfort, held under Charlemagne, bitterly inveighed against the image-worshippers of the East and the second Council of Nice. And indeed, this controversy gave occasion to many wars, tumults, and revolutions in the East, and was not the least among the causes of the loss of Asia. The Jews too, and Saracens, have held the veneration which is paid to images among the other reasons of their hatred against Christians; nor can it be denied that, even at an early period, many abuses in divine worship had gained ground among the people; and that one among the causes of the success of Mahomet and his followers, was their pretended boast of restoring the worship of the one God. The partisans of the Reformation in the last century, also, found a plausible colour for their undertaking, in the very same profession.

On the other hand, the use of images in worship appears clearly to be founded on principles of utility and reason. What object have we in reading or listening to histories, but in order that the images which they represent may be painted on our memory? Now as these images are of themselves very fleeting, and are not always sufficiently distinct and clear, we should gratefully acknowledge, as a great gift of God, the arts of painting and sculpture, through whose aid we obtain enduring images, representing the objects with the utmost accuracy, vividness, and beauty; by the sight of which (in the impossibility of referring to the originals) the internal images may be renewed, and, like the impression of a seal on wax, more deeply imprinted upon the mind, And as the use of images possesses such

advantages, in what circumstances, I ask, can it be more fitly introduced, than in those in which it is of greatest moment that the images impressed upon our memory should be especially lasting and vivid, that is, in the concerns of piety and of the Divine honour? And this is especially true, because, as I have observed above, the worship of God is, pre-eminently, the most fitting field for the display of all the arts and sciences, and therefore also of painting.

To one who considers these things, it must be clear beyond all doubt, that if the law of God and certain holy men chose to prohibit, at certain times and in certain places, a thing which in itself is harmless, and indeed which, if religiously practised, is eminently useful, it was solely because it might give occasion to grievous abuses, against which it was difficult to guard in those times. We must see, then, in what these abuses chiefly consist.

In the first place, therefore, before the written law was promulgated by God, and while his true worship was propagated solely by the tradition of the elders, many men came to forget the one infinite and invisible Creator of all things, and fell away into the worship of those things which were within reach of their imagination, the sun, the moon, the stars, the heaven, and the elements. By degrees, either through the ambition of tyrants, or, in some cases, through the veneration entertained for men of eminent merit, it came to pass that mortals were elevated into gods. And although there were some who worshipped one particular God as superior to all the rest, yet the superiority which they attributed to Him was not that of a being removed from the others by an infinite interval, but only that of a more excellent man among his fellow-men. Now the use of images and statues tended very much to promote this perverted worship. For in these, men had before their eyes perpetual incentives to the corrupt inclination which had gradually grown inveterate; and, by representing to themselves the dead as living, they fostered this most erroneous conception of the Divinity. And at last,

when, by degrees, their superstition began to imagine that there existed, and indeed that there had actually been observed, in the statues, certain mysterious signs of the presence and even of the interposition of the gods, which the interested priests circulated or exaggerated through the desire of gain, they came thence to think that there dwelt in the statues themselves some peculiar virtue of the Divinity.

To these corruptions of the Gentiles, the patriarchs, who remained true to the worship of the invisible Substance, strenuously opposed themselves. One of these, Abraham, bound himself by a peculiar treaty to the true God, and by this religious rite happily secured the fidelity of his posterity. Certainly, it was chiefly through those races which are regarded as descendants of Abraham that the worship of the one God was preserved, and was by degrees again diffused among the other nations. And when Israel, who was the grandson of Abraham, was driven by famine to go down into Egypt, and the Israelites had multiplied there, it pleased God, lest their constancy should be gradually undermined by the contagious influence of this most superstitious nation, to lead forth his chosen people with a strong hand from the slavery of Pharaoh, and to give them new laws through the mouth of Moses; one of which interdicted them from all use, or at least all sacred use, of images, in order that they might the better be preserved pure from idol-worship, which was then almost universally received. Perhaps the same reason continued in force among the early Christians; and in the designs of God and of the holy men of that age, it seemed more safe to lean to the opposite side, and to dispense altogether with a matter which in itself is good and useful, but still is unessential, than to expose souls yet tender and ill confirmed in the faith, to danger of idolatry.

And hence, if there existed, even at the present day, great reason for caution, and a fear that their use would lead to idolatry, I doubt not that it

might be right to deal with images, as Ezechias did with the brazen serpent, though this had been set up by the order of God himself. In the same way, also, it would be advisable to abstain from introducing them among a people who would, perhaps, be deterred from embracing Christianity by their detestation of images; — a contingency which may yet arise, among the Arabs, the Persians, the Scythians, and the other nations of the East, if it shall please God to favour the arms, or rather the preaching, of the Christians, and to bring on the fatal day of the Mahometan domination.

Hence, when all the reasons are carefully balanced, we must come to the conclusion, that the law of God, if any such law existed, against the use of images, and even against such a worship of them as does not trench in any way upon the Divine honour, was merely a ceremonial precept; that it was but temporary in its nature, and perhaps was retained for a while by the first Christians, on account of grave reasons; — in the same way as the law of the Sabbath-day, and that concerning the use of "*blood and things strangled*," which, though enforced by a much more express passage of the New Testament, nevertheless fell into disuse among the majority of Christians, as soon as the reason for observing them was at an end.

Indeed, there are examples which prove that it admitted of dispensation, even among the Jews; for although the law appears utterly to prohibit images and graven things, yet (not to speak of likenesses of inanimate objects) we read of the golden cherubim and the brazen serpent which were constructed by Moses; and of other cherubim, and oxen, and lions, which were made by Solomon, and, for the most part, were set up even in the holy place, some of which were expressly ordered, and others at least approved. And although it appears more probable that, in the origin of Christianity, there were no images in the oratories, or very few, (for we find mention in Tertullian of one image of Christ, under the form of The Good Shepherd seeking the Lost Sheep, graven on the sacred chalices,) yet it cannot be

denied that they were gradually received into use; and St. Gregory, Bishop of Nyssa, describes a picture of the sufferings of a certain martyr, as elaborately painted on the wall of a temple: — to pass over other testimonies for the present.

But as regards the actual veneration of images, it cannot be denied that, through fear of superstition, Christians long abstained therefrom, especially as long as pagans were still intermingled with them in considerable numbers. But when the worship of demons was at last exploded throughout the greatest part of the known and civilised world, and when the gods had ceased to be mentioned except in jest, even grave men no longer saw cause why images, which are the alphabet of the unlearned, and which to the simple people supply a great incentive to piety, should be excluded from worship.

Nevertheless, the iconoclast contests in the East, and the opposition of the fathers of Frankfort, shew that opinion long continued to fluctuate; and even St. Gregory, surnamed the Great, the Pontiff of the Roman Church, who lived still earlier than these, appears to have varied in his sentiments. For, in a letter to Serenus, Bishop of Marseilles, he approves of his having forbidden the adoration of images, and, at the same time, rebukes him for having broken them. And yet, writing to one Secundinus, to whom he had sent an image of the Saviour, he says: “We do not prostrate ourselves before it as before a Divinity, but we adore Him, of whom we are reminded by the image that He was born, or that He suffered, and that now He sitteth upon the throne.” Now this proves, not obscurely, that Gregory was wont to adore Christ in presence of an image, or turned toward an image. And this, as I shall state hereafter, is precisely what others call adoration of images. And thus Gregory appears, in order to avoid scandal, to have accommodated himself to those to whom he wrote, in a matter which he deemed of itself indifferent; for the practice of venerating images came but tardily into use

in Gaul, and was much earlier in the East and in Italy. And a priest, named Claudius, who was sent from Gaul into Italy, by Louis the Pious, and was made Bishop of Turin on account of his learning, relates that he incurred danger by resisting the worship of images, as appears from the work of Jonas of Orleans, who wrote a refutation of his doctrine. The reason of this difference, I think, may be deduced from the different genius of the nations; for the inhabitants of the latter countries have always been of a more vivid imagination, and therefore more given to ceremonies. Whence we find that they paid to the statues of Emperors and Kings the same honours as to the prince in person — a thing almost unknown in Gaul and Germany. It is not strange, therefore, that those nations should regard with horror, as a sacrilege, the denial in other countries of that honour which they themselves pay to the images of Christ and the Saints, (though this may sometimes have been from a good and laudable zeal); because they see the prototype present, as it were, in the image; for they pursue the associations to a greater length in their mind, and therefore their imagination is more delicate and exquisite. And yet the same nations, when imbued with the contrary opinion, may fall into excess on the opposite side; as, for instance, we find that the Mahometans cannot tolerate pictures of living things even in profane use. By degrees, however, Gaul and Germany, and almost the whole Christian world, followed the example of the East and Italy, and continued so to do until the changes of the last century.

But before we lay down the principles which are to be held regarding the received worship of images, we must see in what it consists; and this we cannot ascertain better than from the words of the Council of Trent, which run thus: “Moreover [let the bishops teach] that the images of Christ, of the Virgin Mother of God, and the other Saints, are to be had and retained, especially in temples, and due honour and veneration paid to them: not that we believe that there is in them any divinity or virtue on account of which

they are to be worshipped, or that any thing is to be asked from them, or that trust is to be placed in them, as was done of old by the Gentiles, who '*placed their hope in idols;*' but because the honour which is shewn them is referred to the originals which they represent: so that, through the images which we kiss, and before which we bare the head and prostrate ourselves, we but adore Christ and venerate the Saints, whose likeness they bear."

The decree subjoins, that "through the histories of the mysteries of our redemption, as expressed by pictures or other representations, the people are instructed, and are strengthened in recalling and assiduously meditating on the articles of faith; and furthermore, that great fruit is derived from all images, not only because they recall to the minds of the people the benefits and gifts which they have received from Christ, but also because by them the wonders of God, wrought through the Saints, and their saying examples, are set before the eyes of the faithful; to the end that they may give thanks to God for them, that they may compose their lives and morals to the imitation of the Saints, and may be excited to adore and love God, and to cherish piety." In these words of the Council I do not see what it is possible to censure. And it is afterwards added, that "the holy synod anxiously desires the suppression of the abuses which have crept in."

But, to discuss the matter more distinctly, we must reflect, that the honour paid to images is of two kinds: the first, the honour which properly belongs to the image itself, as its being set in a prominent and honourable place, adorned, set off with lights, carried in procession; — and this honour, I think, presents but little difficulty, and will easily be tolerated by any one who does not think that images are to be rejected altogether: — the second, which is referred to the original, and which demands more diligent examination; and this is the veneration of images regarding which the controversy arises. Such, for instance, is the act of men kissing an image, bowing the head before it, bending the knee, prostrating, pouring forth

prayers, making vows, offering praises, or giving thanks. But indeed, although by the established use of language, the honour is said to be, in such case, paid to the image, yet in reality, in the sense in which the Council explains the honour to be rendered to images, the object to which the honour is referred is not the thing, which is inanimate and incapable of honour, but the original, in the presence of the image, or through the image. And hence it was, I suppose, that some scholastics maintained that the adoration paid to the image of Christ is the same supreme worship of Latria as that of the Lord Christ himself. For this act which is called adoration of the image, is in reality but adoration of Christ himself, suggested by occasion, and in consideration, of the image, to which the body is turned as to Christ himself, in order that his presence may be presented more forcibly, and the mind may be more sensibly elevated to the contemplation of the Lord. For no man in his senses will intend to say, "O image, grant my petition!" "To thee, O marble!" or "O stone, I give thanks"" but "*Thee*, O *Lord*, *I adore! to Thee I sing praises!*" In these times, nevertheless, it would seem to be useful, and conducive to piety, to abstain, for the purpose of avoiding scandal, from all those expressions of the scholastics which convey that an image is to be reverenced with the Divine honour of *Latvia;* phrases which the Council has prudently avoided, and of which it sufficiently conveys its disapproval.

Supposing, therefore, that no other species of veneration of images is admitted than simply the veneration of the original in presence of the image, there will no more be idolatry in this practice, than in the veneration which is shewn to God and to Christ, when his most sacred name is pronounced. For names, too, are signs, and, indeed, far inferior to images in significancy; for they are much less perfect representations of the object. When an image, therefore, is said to be honoured, the act should not be understood in any other sense than when it is said that "*in the name of Jesus*

the knee is bowed," that "*the name of the Lord is blessed*," that "*glory is given to his name*" And it is not a whit more censurable to adore before an external image, than it is to adore in presence of the internal image which is painted on our imagination; for the only use of the external image is to render the internal one more vivid.

The Council wisely cautions us not to believe that any "virtue or divinity exists and dwells in the image itself a superstitious belief similar to that of the Trojans, who thought that the city would fall, if the Palladium were taken away; and of the Romans, who used a set form of words in order to call out the gods from the enemies' temples, and believed that the god himself was transferred along with the image; and of some among the Gentiles, who were convinced that carrying the statue of a particular god in procession would ensure success: of which superstitions concerning images, the Arabs still retain a trace in certain figures and talismans; and the Jews, in certain written or spoken names; which undoubtedly implies an adoration of the images or of the names.

No less wisely did the Council add, that "neither is trust to be placed in images;" as if, for example, devotion would be less grateful to God, or prayers less efficacious, if the image chanced to be removed, or lost, or changed; which is certainly a superstitious belief. And we must maintain in like manner regarding relics, that their loss or even their spuriousness, would not prejudice the prayer of the suppliants, provided their piety continued the same. For we must also hold, that visits undertaken, either voluntarily or from vow, to certain places of especial sanctity, and other similar works, are sometimes profitable to piety; for even the very journey and the other details of the undertaking form part of the honour; and the discipline of soul, the penance and obligation voluntarily undertaken, the peculiar manifestation of fervour and zeal, and the union of our private tribute to God's honour with the public expression of the piety of the

assembled people, are all acts worthy of commendation; — and the very place itself, signalised by divine favours, moves the mind more forcibly by its memories and associations, and strikes it with a kind of holy awe; as I remember even Protestants, who had had the happy privilege of visiting our Lord's sepulchre, to have admitted.

The same grace, nevertheless, will be obtained in any other place where the same lively faith and the same devotion of soul are found, even though the images, relics, and similar external helps be wanting; for such things have not their efficacy, so to speak, from the rite itself *(ex opere operato*), like the Sacraments, but from the disposition of the subject *(ex opere operantis*), as the schoolmen say. And therefore, as the observance of certain times as peculiarly holy, is profitable solely because it excites to piety by a kind of special admonition, it is the same with the reverence of particular places, and the rites performed, or the objects preserved, therein. No person, therefore, who approves of the distinction of seasons and of the observances peculiar to them, is justified in condemning the distinction of places, and of the sacred objects preserved in them; nor is there any greater reason, therefore, for rejecting sacred pilgrimages, than festival-days.

Besides, I do not see what evil there can be in bowing down before an image of the crucifix, and, while we look upon it, honouring Him it represents; whereas, on the other hand, its advantages are manifest, inasmuch as it is certain that it has a wondrous effect in exciting the affections. We have already seen that such was the practice of Saint Gregory the Great; nor are the followers of the Augsburg Confession entirely averse to it. And indeed, if it were not certain that there existed in former times grievous abuses of images, which have cast suspicion on a practice excellent in itself, and if we did not actually know what contests, both in ancient and modern times, have arisen concerning it, perhaps it would not be easy for any one to suspect any hidden evil or danger, or even

any cause of scruple, in the practice of worshipping in presence of an image; — so innocent, nay so correct and laudable does this practice in itself appear.

It is commonly objected, indeed, that the pagans used the same qualification; professing that it was not the marble or wood, but the gods, that they worshipped. But in addition to their attributing a virtue to the images, and reposing confidence in them, we have already anticipated this objection by shewing, that the reason why image-worship is bad, and why it was prohibited of old, is not because of its own intrinsic evil, but because it inclined to the worship of false gods; for (from the received use of the word) that only is really idolatrous, which transfers to another the honour due to God. Now in the Church at the present day, all the honour paid to images is referred solely to those originals, through which we venerate that one and eternal Deity, to whom alone we have been taught to pay divine honours, and whose benefits we contemplate in others, in order that, admonished the more thereby, we may terminate our worship in Himself.

I see one plausible objection; namely, that it is safer to abstain from a practice which is at all doubtful. Now to this I say, that if the doubt be trivial, the conscience which is thereby troubled is a scrupulous one. I admit, indeed, that in the present dispositions of many among Protestants, (to say nothing of Jews and Mahometans,) much offence arises from the use of images; but, on the other hand, it must be considered what tumults and scandals, what rivers of blood, would be necessary, in order to eliminate from the Church this usage, which in itself, and apart from abuses and scandals on both sides, is a most excellent and praiseworthy one. Justly, therefore, has it been decreed that it should be retained. Nor can its retention afford to any one a just cause of separation. Nor is it to be believed that "*the gates of hell*" have so far "*prevailed against the Church*" and against the assistance which Christ promised to her, that, for so many

ages, a damnable form of idolatry should have been established over the entire Christian world.

All things considered, therefore, seeing that in the practice of venerating images, as it is approved by the Fathers of Trent, there is nothing opposed to the divine honour that there does not appear to be, in these times, when all are sufficiently aware that the Omnipotent Deity alone is worshipped with divine honour, any fear of idolatry, which might pervert the honour due to God; that, moreover, there exists in the Church a usage of so many centuries, which cannot be abolished without the greatest revolutions; that, in fine, if the abuses be removed, it is productive of signal advantage to piety; I conclude that the retention of the practice of venerating the original in the presence of the image (in which alone image-worship consists) is a judicious and pious measure, provided it is confined strictly within its own limits, and the utmost caution is observed in its use. Care, however, must be taken to teach the people to think and speak correctly on a matter which is connected with the divine honour; and to avoid every thing which may be productive of scandal, and may have the effect of alienating men's minds more and more from the unity of the Church, or of deterring those who are disposed to return.

I will mention an instance which I myself remember. A soldier, who had deserted from the ranks, was condemned to be hanged; and when he was brought in sight of the gallows, and was in momentary expectation of the final sentence of pardon or of death from the Protestant prince in whose service he was, fluctuating as he was between fear and hope, he bathed with his tears a little silver image of the crucifix. But, on the arrival of the happy news, he exulted with joy, and, printing kisses on the image, exclaimed, "'Tis to thee I owe my safety. 'Tis thou that hast snatched me from the jaws of death. 'Tis thou that hast delivered me!" So far, his language was correct. But when one of the bystanders, a man of rank, (and they were almost all

Protestants,) added, as if calling his attention to what he had said, “Surely you do not mean this figure of Christ which you hold in your hand, but the Christ who suffered for us?”

“Yes,” said he, redoubling his kisses; “it was this one also;”— “*Et cettuy-cy aussi*” for he was a Frenchman. These words were heard with great horror by the bystanders; as if there were two Saviours, one the living Christ, the other the silver one; and one of them assured me that the hideousness of the papistic idolomania (for thus they speak in their unhappy misconception) had never appeared more clear to him. For my part, I think that this poor wretch, in his agitation of mind, did not sufficiently reflect on the words which he was using; and that the crime was in his language, rather than in his mind. Still, it is of great importance that these expressions should be carefully examined, in order that the people may be duly instructed.

And as there are Protestants who do not find in image-worship any just cause for severing the unity of the Church, so there are, on the other hand, learned Catholics who are of opinion, that if Protestants, and, in general, the nations which know not, or reject, this worship, should persist, through some inveterate repugnance, in declining to adopt it, they might, nevertheless, be received into the bosom of the Church; provided they manifested good dispositions in every other respect, evinced a readiness to receive instruction, and admitted, meanwhile, that Catholics are not to be condemned on account of the practice. For in such things as these, which are neither necessary in themselves, nor expressly prescribed by Divine law, some allowance must be made for men’s inclination and for custom, in order to avoid the scandal of weak brethren.

The question of Saints and of Relics is connected with that of images; and much of what we have said concerning images is equally applicable to this

subject. And, as a general principle, we must hold, that neither the act of adoring in presence of an image, nor the worship of Saints or of relics, is approved, except in so far as they are referred to God; and that no act of religion is allowable, which may not be resolved into the honour of the one Almighty God, and does not terminate therein. When the Saints are honoured, therefore, the honour should be understood in the sense in which it is said in Scripture, "Thy friends are honoured, O God!" and "Praise ye the Lord in his Saints" And when the Saints are invoked, and their aid implored, their aid must always be understood to consist in the prayers which they pour forth with great efficacy in our behalf; as Bellarmine has observed, that "Help me, O Peter, or O Paul!" is to be regarded as signifying nothing more than "Pray for me!" or "Help me by interceding for me!"

It is certain, indeed, that Angel-guardians are assigned to us by God. Now the Scripture compares the Saints to Angels, and calls them "equal to Angels" (ισαγγελους).

That the Saints have some concern in human affairs, appears to be conveyed by the "*talking of Moses and Elias with Christ;*" and that even particular events come to the knowledge of the Saints and Angels, (whether it be in the mirror of the Divine vision, or by the natural clearness and wide-ranging powers of vision possessed by the glorified mind,) is insinuated in Christ's declaration, that there is "*joy in heaven upon one sinner that doth penance*" Further, that God, in consideration of the Saints, even after their death, grants favours to men (although it is only through Christ that the Saints, whether of the Old or of the New Testament, possess their dignity), is indicated by the prayers found in the Scripture: "*Remember*, *O Lord*, *Abraham*, *Isaac*, *and Jacob*, *thy servants!*" a form not very different from that which the Church commonly employs: "Grant, O Lord, that we may be assisted by the merits and intercession of thy Saints!" that is, "Regard their

labours, which, by thy gift, they have borne for thy name; hear their prayers, to which thy only-begotten Son hath given efficacy and value!”

Some persons raise a question as to the manner in which the Saints can have a knowledge of human affairs; and St. Augustine himself seems to have hesitated and entertained some doubt regarding it. But, for my part, I do not think it consistent with truth to suppose that these most holy souls are shut up in a place where, it is true, they are in the enjoyment of delights, but are ignorant of the events which are passing, or if they obtain some casual knowledge of them, obtain it solely through the intervention of the angels. Because knowledge is the source of the highest pleasures of the mind; and as the souls of the Blessed contemplate more closely the Divine wisdom and perfection, it is reasonable to suppose that they are now admitted more intimately to the secrets of Providence, which, while in the flesh, they admired from afar; and that they now know the infinite justice of God’s government, which heretofore they but believed; and this, I think, cannot be conceived without supposing them to be cognisant of the particular events that pass among men. Many are inclined to think that it is in the mirror of the Divine vision the Angels and Saints see all things. However, if you consider the matter accurately, it will be seen that, even now, God is the sole immediate object of the mind, outside of the mind itself; and that it is only through the medium of God our ideas represent to us what passes in the world; for on no other supposition can it be conceived how the body can act on the soul, or how different created substances can communicate with one another. Nay, we should be aware that, in every state of existence, our mind is a mirror of God and of the universe; with this difference, that, in the present state, our view is clouded, and our knowledge confused. When, therefore, this cloud shall be withdrawn, and when God shall manifest Himself more clearly, we shall see God face to face, and we shall see all other things (as we do even now) in Him as the medium; but we

shall see them far more clearly, distinctly, and comprehensively, than we see them now; partly by the very nature of the mind in its glorified state, partly by an especial grace of God.

Nor should any one wonder at the possibility of an Angel or Blessed Soul's seeing at a single view the affairs of Asia and of Europe, and, while he embraces so vast a range, penetrating, nevertheless, even into its minutest parts. Let us but reflect how many objects the general of an army, placed on an eminence, reviewing his forces or disposing his line, sees at the same time. Now, if it be considered that the glorified mind's powers of vision are enlarged in the same proportion as our universe is greater than the plain, all wonder will be at an end. If the vision is extended more than a thousand-fold by the use of telescopes and microscopes, shall we doubt that God can grant to the Blessed much more than Galileo or Drebel has given to us? You will tell me, indeed, that these instruments do not admit of our seeing many things distinctly together, and that in proportion as the field of the tube is increased, its power is diminished. It is so, I confess; because in this case the assistance is given to the eyes, which are restricted within certain dimensions; but in the other case God increases the power of the mind, which has no defined and immovable limits. We know that a tribune, or, at all events, a centurion, can have his soldiers drawn out and disposed so perfectly under his view, that not a motion of theirs escapes him. And to how many objects does the chess-player apply his mind by one glance! As the mind, therefore, is capable of considering many objects distinctly at the same time, there is nothing to prevent the number of objects being increased in many thousand ways, without affecting the distinctness of the knowledge. And perhaps the ratio of the number of the remarkable occurrences among the entire human race, to that of the variations which a scientific chess-player has to consider together, is much less than the ratio which the glorified mind bears to ours. For, even here on earth, we see what

a vast difference, in applying the mind to many different things together, there is between an unskilled and a practised man; and we might almost consider miraculous (though we, nevertheless, find it true,) the readiness with which some persons can perform the longest calculations by a purely mental act, so as to appear to read them from a manuscript; and can retain innumerable images of the fancy so perfectly under view, as to be able to select in an instant the particular one which may be required.

From reasons, however, let us come to examples and authority. It is certain that, even in the second age of the Christian Church, the natal days of the martyrs were celebrated; that religious meetings at their monuments were instituted; and that the prayers of Saints were believed to be profitable. For Origen, a writer of the third century (Num. c. xxxi.), asks, "Who doubts that the Saints assist us by their prayers, and confirm and exhort us by the example of their actions?" He speaks of the opinion, therefore, as a thing thoroughly ascertained and received in his times. And Origen himself (in his Commentary on the Epistle to the Romans) seems, in his own private judgment, to have inclined to the opinion, that the Blessed assist us, not only, as is the received belief of the Church, by intercession, but also by actual interposition, like the Angels. However, he speaks doubtingly, and says, that, if the opinion be true, "it must be numbered among the hidden mysteries which may not be committed to paper — a caution, perhaps, which he thought necessary in order to avoid superstition. St. Cyprian commended himself to the living, praying them to remember him after their death (B. 1. Epist. I). And if, as some persons think, no examples of the invocation of Saints, in the same way as of image-worship, can be found in those times, the answer must be, that, previous to the extirpation of idolatry by Constantine, the Church carefully avoided every thing which, even though in itself harmless, could, by any means, be distorted into a confirmation of the Gentile superstitions. At all events, it appears from St.

Basil the Great and St. Gregory Nazianzen, that, in the fourth century, the invocation of martyrs by name, and the belief of their power to assist us, was already received. St. Gregory of Nyssa says, that "supplications are offered to a martyr, to become, as it were, our ambassador with God." And St. Ambrose, in the book On Widows, after observing that Peter and Andrew prayed our Lord for Simon's mother-in-law, who was sick of fever, says, that "one who is subject to great sins, acts wisely in employing others to intercede with the physician in his behalf;" and that "Angels and martyrs are to be invoked."

Now, if it be an act of idolatry, or, at all events, a damnable worship, to address Angels and Saints, and solicit their intercession in our behalf with God, I do not see how Basil, and Nazianzen, and Ambrose, and others, who have hitherto been accounted Saints, can be excused from idolatry, or, at least, from the foulest abomination. For these practices will not be what are commonly called blemishes of the Fathers, but great and manifest crimes. And there is reason to dread lest views like these may open a way for the subversion of the whole Christian faith. For if it be true that, even from this early period, such horrible errors prevailed in the Church, the fact will furnish a strong argument for the cause of the Arians and Samosatenians, who date the origin of error from these very times, and insinuate that the mystery of the Trinity and the practice of idolatry were simultaneously introduced. Thus the authority of the early Councils is destroyed; and, as we must admit that the most Holy Trinity is not so clearly proved from Sacred Scripture, as that we can satisfy every doubt if we set the authority of the Church aside, I leave each one to form his judgment as to where the matter will end. Nay, more daring spirits will carry suspicion farther; for they will wonder how Christ, who was so prodigal of promises to His Church, should have, nevertheless, indulged the enemy of the human race, so far as to permit that, after one species of idolatry had been exploded, another should

take its place; and that, while we see the Jewish and Mahometan religions continue, for so many ages, to maintain incorrupt in a sufficient degree the original constitution of their founders, yet, out of the sixteen centuries of Christianity, there are scarcely one or two during which the true faith was in any degree preserved among Christians. What then will become of the counsel of Gamaliel, who advised that the Christian religion, and the will of Providence in its regard, should be judged by the issue? or what estimate are we to form of Christianity itself, if it withstand this test so badly?

Nevertheless, I do not therefore deny that there had crept in commonly in the Church abuses, and these too of a sufficiently grievous nature, which in after times degenerated into dangerous superstition. Thus St. Epiphanius (whom we also find removing from a temple an image which was painted upon the veil, lest it should lead to abuse,) inveighs vehemently against the Collyridians and others, who paid excessive honours to the Mother of God and the other Saints. In our own times too, grave complaints have emanated from bishops, not only of France and Belgium, but also of Spain and Italy, and from other eminent men. And even the Council of Trent prudently ordained that the abuses should be checked; and that not merely for formsake, as some writers maliciously assert, but seriously, and not without success. For many salutary measures have been passed in the congregations of the Cardinals, with the view of restraining the levity and superstition of certain individuals; and several admirable bulls have been issued by the Popes — as, for instance, Urban VIII. and Innocent XI. the former eminently distinguished for his learning, the latter for his piety, — by which many abuses have actually been abolished, or at least repressed.

Nor do I doubt that, by the zeal of the Pontiffs, the sovereign princes, and the learned and pious prelates of the Church, the greatest part of this cockle may gradually be rooted out of the field of God; for he who would seek to remove it all by one effort, should beware lest he disturb the Church

and injure the wheat. In all those things which are more tolerable, we should follow the counsel of St. Augustine, who, in a letter to Januarius, complainingly avows, that "there are many things which, to avoid the scandal of some pious or turbulent persons, he does not dare to censure too freely and, in his work against Faustus the Manichee, he observes that, "what we teach is one thing, what we bear another; one thing, what we are ordered to prescribe, another what we are instructed to correct, and are compelled to tolerate until we shall be able to correct." Such is the opinion of this man, no less distinguished by his prudence than by his sanctity. This, however, must be understood to mean, that we are to pay due regard to the interest and peace of the Church; and we are neither to flatter men by shameful indulgence, nor are we, on the contrary, under the influence of anger, love of contradiction, or impatience of correction, to strive after what is forbidden, and to approve what in our calm mind we should ourselves reject, solely for the purpose of annoying our adversaries, or expressing our abhorrence of them the more strongly. And, in like manner, Protestants should reflect that the truth is sacrificed by excessive altercation; that by mutual hatred men are carried into excesses; and that the Church is not to be accused solely because she is unable to remove, by a single stroke, every thing that she seriously and severely condemns.

Nor, however, are the protestations fruitless, as the adversaries of the Church assert; for they will discover in the writings of Catholics, cautions, which, if observed, will remove all the chief causes of complaint; as, for example, where Cardinal Bellarmine writes, that whenever the aid of the Saints is asked, it must be understood "that they assist us, not of themselves, but by their intercession with God;" a qualification which should be diligently inculcated, and which, generally speaking, should be added in express words, especially in more solemn prayers. And the Bishop of Meaux, author of that golden treatise, The Exposition of the Faith, has

given this excellent admonition, that all religious worship should terminate ultimately in God. Similar cautions may be found in the writings of others, which, for brevity-sake, I abstain from citing. I shall only advert to some which are of greater importance; as, for example, that when we pray to the Saints, we should be careful not to detract thereby from the Divine mercy. For the Psalmist says, "I will sing" not only "the justice," but also "the mercy, of the Lord:" in one single psalm, he has repeated twenty-seven times, that "his mercy and goodness endure for ever and we are most severely forbidden to place our confidence (that is, ultimately) in men. Moreover, as mercy is among those attributes of God by which men's affections are most conciliated, it seems inconsistent with a right love of God to deny Him mercy; nor should we tolerate, therefore, such language as that "God has reserved justice to Himself, and has given up mercy to the Blessed Virgin;" and that this was prefigured in the history of Esther, to whom Assuerus promises half his kingdom; for it is only by virtue of the Lord's own mercy that the prayers of the Saints possess their power of profiting us. These cautions, therefore, should be carefully impressed on men's minds; for there may be danger lest, if an erroneous impression be allowed to be formed, the simple faithful may fall away from the love of God, and from true penance and contrition.

Moreover, though we may use the intercession of Saints as a slender supplement of our devotion, yet it is necessary, at the same time, to address ourselves directly to God. For the Saints, however great they may be, are all our fellow-slaves; and the only true "*Mediator of God and man*" is Christ, who is raised as high towards the Father as the Saints are depressed to us: for they stand, as it were, at our side, or in our company, as if praying conjointly with us. And therefore their intercessions can no more come at all into comparison with the mediatorial office of Christ, than can the prayers of living Saints when united with ours; and although the prayers

which are offered by the Blessed in many ways surpass those of holy persons on earth, yet, relatively to the mediation of Christ, they can no more bear any proportion, than a man, by leaping up towards the sun from the ground, can be said to have gone nearer to it.

But, in addition to this, God expressly commands, both by threats and by promises, that He should be Himself invoked. He is Himself called "*our hope*," "*our trust.*" "*the way.*" "*the door.*" "*our strength.*" "*our aid.*" "*beside whom there is no salvation.*" "*no other helper;*" that is, none who can anywise come into account, if compared with God or with Christ. Nor should any consciousness of unworthiness on our part be deemed sufficient to repel us from the throne of grace, when our repentance is sincere. He himself invites us, when He says, "*Come to me*, *all you that labour*, *and are heavy burdened*, *and I will refresh you*" And, "*If any man sin*, *we have an advocate with the Father*, *Jesus Christ*, *who is the propitiation for our sins*" And although it is a laudable act of reverence to account oneself unworthy the sight of God, and to employ every sign of a humble mind (among which signs the employing pious men on earth, and still more the blessed in heaven, to pray with us, is one which not only should not be despised, but should be warmly commended), yet, since He himself invites us, it is our duty to obey and approach to Him; lest, instead of filial humility, there grow up a spirit of servile estrangement and distrust. Hence the admirable sentiment of Chrysostom regarding the Canaanite woman: "Behold the prudence of the woman! she asketh not James, neither entreateth she John; she goeth not to Peter, she addresseth herself not to the choir of the Apostles — that is to say, she goes not to them (for we are bound, from other passages, to put this interpretation upon Chrysostom) in such a way as to rest finally upon them, or to place her hopes in them alone; for it appears elsewhere that she was importunate with the disciples also, as even they themselves declare. Chrysostom continues: "She sought not a mediator; but,

instead of all these, she took as her companion, Penance, which filled the place of an advocate, and thus went to the fountainhead."

It is necessary, therefore, always to bear these things in mind, in order that, if the intercession of Saints be employed, it may be regarded in the light of a supplementary devotion, and of a simple mark of our reverence and humility towards God, and love for God's friends; and that the substance of the worship may always be addressed directly to God himself.

Hence pious and prudent men are of opinion that all pains should be taken, not only to impress, by every means, upon the minds of hearers and learners, the infinite and unmeasurable difference which exists between the honour due to God and that which is shewn to the Saints (the former of which, divines, after Augustine, call λατρεια, the latter, δουλεια); but also to exhibit it, as far as possible, by external signs. For although there is no proportion between the infinite and the finite, and although it is, for this reason, impossible to find proportionate signs of both — a thing which cannot be done even in finite things, where they differ widely from each other (as we see that, in a picture, it is impossible to represent properly the true proportion of the system of the world, because the distance of the fixed stars is immeasurable), — yet, at least, we should not omit those signs which, as far as it can be done, may at least signify that the difference is the greatest that exists; and it is better to omit altogether that which, being finite, is unworthy of comparison, than so to equalise it with the Infinite and Divine, as to incur grievous danger of creating a most fatal confusion of them. And although we may not be able to be perfectly exact and scrupulous in observing this caution, yet the more secure course will be to neglect it as little as possible. It is advisable, therefore, that we should reserve certain determinate external signs for God alone; that we should not mix up indiscriminately the honour of the Saints with that of God, but should distinguish them, as far as is conveniently possible, if not in place, at

least in time; and lastly, that, when it is necessary to unite them, we should frequently add words which may indicate the immense difference that subsists between them, and may declare that whatever of dignity and power the Saints possess, is all from the Divine grace and the merit of Christ, and that the mercy and goodness of God himself superabound in an endless variety of ways.

If these precautions for the security of the essentials of worship and the maintenance of the Divine honour be observed, we shall be able, with St. Augustine, to tolerate many things in the Church, which, could it prudently be done, it were better to reform hereafter; and hence the charge which imputes to the Church the idolatry of the Gentiles, is neither just nor charitable. It is true, they assert that the Gentiles also rendered to their gods a worship inferior to that of the Supreme God; and therefore, that these gods only differ from the Saints of Christians in name — the former being called *Dii*, and the latter *Divi.* But this accusation is undoubtedly unjust. For, omitting the consideration, that (whereas it is certain that the Saints are friends of God) the *Dii* or *Indigetes* of the Gentiles were men unworthy of that honour; and that, whereas the gods of the Gentiles were worshipped not as the ministers but as the associates of Jupiter, all our worship of Angels and Saints is terminated in God, who "*hath given his Angels charge over* us," and is moved in our favour by the prayers of the Saints; omitting, I say, these considerations, the entire matter comes to this, that the Gentiles did not sufficiently acknowledge, either in their Jupiter, or in any other of their gods, the Infinite and supremely Perfect Being; and that therefore, at least as far as appears from their public worship, all their gods, not even excepting the highest, were idols; whereas Christians, who worship with Divine honour, or *latria*, the supreme, eternal, and infinitely perfect Being, do not commit idolatry, no matter what degree of finite perfection, not trenching on the supreme honour of God, they may attribute to others; since

they confess that these perfections themselves flow gratuitously from the fountain of the Divine goodness.

Seeing, therefore, that the blessed souls, in their present state, are much more intimately present in all our affairs, and see all things much more nearly, than while they lived on earth (for men are acquainted only with the few things which occur in their sight, or are reported to them by others); seeing that their charity, or desire of aiding us, is far more ardent; seeing, in fine, that their prayers are far more efficacious than those which they offered formerly in this life, that it is certain that God has granted many favours even to the intercessions of the living, and that we look for great advantage from the union of the prayers of our brethren with our own; I do not perceive how it can be made a crime to invoke a blessed soul or a holy Angel, and to beg his intercession or his assistance, according as the life and history of the martyr, or other circumstances, appear to suggest: especially if this worship is considered but as a slender accessory of that supreme worship which is immediately directed to God alone; and if, whatever may be its character, it is offered for the sake of testifying our reverence and humility towards God, and our affection for God's servants, and springs from that pious solicitude which prompts us, in proportion to the lowly sense we entertain of our own unworthiness, to desire to unite the prayers of other pious persons, and, above all, those of the Blessed, with our own. And thus, when it is analysed, this very accessory of worship terminates in God Himself; to whose gift alone the Saints are indebted for all that they are or can do, and to whom is due a sovereign honour and love incomparably transcending all other love. For if the veneration and invocation of Saints be circumscribed within these limits, it is, though not of necessity, not alone tolerable, but praiseworthy. At all events, it cannot be regarded as idolatrous or damnable, unless we be willing to affirm, at the imminent hazard of the faith, that the promises of Christ have been

frustrated, and that the true Church fell, from her very origin, into a horrible apostasy. And if, on the other hand, we admit that she has until now subsisted incorrupt against the gates of hell, we should not tear ourselves away from her communion, because she is unable, by a single stroke, to cut off abuses which she herself reprobates; nor is it possible to doubt that she will reform these abuses with greater facility when unity shall have been restored, and when, peace being established, and her attention no longer distracted by the variety of objects, her entire solicitude shall be concentrated upon the cure of her domestic evils.

It is not necessary to add much on the subject of relics. From the example of the bones of Eliseus, it is certain that God has performed miracles through their instrumentality. As we have proved, therefore, that, provided certain limits be observed, the Saints may lawfully be venerated, it follows that it must be lawful to esteem relics also, and to take occasion from their presence, no less than from that of images, to venerate the person to whom they belong. And as it is an affair which alone depends upon pious affection, it does not matter, although the relics which are believed to be real should happen, in point of fact, to be supposititious. We must be cautious, however, lest, by imprudent devotion, we expose ourselves to ridicule, and the Church to contempt, with "*them that are without* and we should always remember, that it is our duty to act in such a way as to shew that these accessories of piety do not unduly occupy our mind, nor divert it from the worship of the one omnipotent God, which alone is of primary and supreme importance, and in comparison of which it is better to neglect all the rest than to depart from it in any particular whatsoever.

Having completed, as far as our brief limits permitted, all that appertains to general worship, (for we shall consider, under the head of the Eucharist, the question of the Unbloody Sacrifice and the adoration of Christ's Body under the appearances of bread and wine,) we must now come to the

Sacraments, which constitute a peculiar kind of worship, and consist of certain sacred rites instituted by Christ, to which a promise of grace is superadded. To this class, however, the promise made to those "*who are gathered together in the name of the Lord*" does not belong; for, as every religion involves the duty of publicly worshipping God, this promise would be understood of itself, even though it had not been expressly made. Under the name of Sacraments, we comprise certain determinate institutions.

And though it is idle to dispute much about names, yet, as the appellation 'Sacrament' has been received in the Church, its meaning should be estimated, not from private caprice, but from public usage. By the name of Sacrament, therefore, is now-a-days understood in the Church, a rite to which a special promise of grace is annexed by God. Some require, in addition, that the rite should be expressly contained and sufficiently described in Sacred Scripture; but it is certain that what is wanting in the written, can, and should be, supplied by the traditionary word of God. Some require, also, that there should be a corporeal and visible element, but this also equally seems to be unnecessary. And some restrict the grace which is conferred to justification and the remission of sins; however, this condition also is arbitrary.

The sacred rites, such as we here define, are seven in number: Baptism, Confirmation, Eucharist, Penance, Extreme Unction, Orders, Matrimony. In Baptism, the rite is ablution with water "in the name of the Father, and of the Son, and of the Holy Ghost the grace is the purification of the soul, the bestowing of faith and penance, and, consequently, the remission of sins and renovation. In Confirmation, the rite is unction: the effect of the grace conferred is indicated by the word Confirmation itself. In the Eucharist, the rite is the ministering of the symbols, according to the prescribed form: the grace is the nourishment of the soul, or the increase of charity. In Penance, the rite is confession and absolution: the grace, the remission of sins. In the

Unction of the Sick, the rite is indicated by the name: the grace is the support of the vital powers in sickness, chiefly in order that, while life is in peril, the soul may be strengthened against temptations. In Orders, the rite is imposition of hands, and whatever else appertains thereto: the grace is the spiritual power conferred on the ordained, which consists in celebrating the perpetual Sacrifice, and in remitting and retaining sins. Lastly, in Matrimony, the rite is the legitimate declaration of consent: the grace is the Divine benediction, to which, as a kind of spiritual effect, is annexed the bond of Matrimony.

No rite has hitherto been discovered which could, even with any shew of reason, be added to these seven; except the "Washing of Feet," which has been, by some, referred to the number. But, although the words of Scripture seem to favour it somewhat, this rite has not received the testimony of the Church; for if this condition had been added, it also should have been admitted as a Sacrament.

Some of the Sacraments are necessary to salvation, so that without receiving them, or a desire, express or virtual, of receiving them, no one can be saved; for one who contemns them, by the very fact, commits a mortal sin. Let us suppose that a person elicits an act of contrition; such a man will certainly obtain remission of sin without receiving the Sacrament, although he may not expressly think of going to a priest as soon as he can, and although, therefore, his desire of the Sacrament is only virtual: because obedience, and the will of doing all that God has ordered and instituted, are virtually contained in the act of the love of God. But, on the contrary, if a person, at the time when he is said to make an act of contrition, has not an intention, although he adverts to the necessity of confession, of going to a priest as soon as he shall be able, such a man has not really elicited an act of contrition. And, after the act of contrition is completed, if, when the thought

of the priest presents itself, he does not form an intention of going to him, he falls into a new mortal sin, and loses the fruit of contrition.

The minister of a Sacrament is sometimes a Bishop, as in the Sacraments of Orders and Confirmation: sometimes a priest, as in the Sacraments of the Eucharist, Penance, and Extreme Unction: sometimes any one of the faithful, as in the Sacraments of Baptism and of Matrimony. And we must hold that, by the Divine law itself, these are constituted the ordinary ministers, insomuch that without them the act is null. In certain circumstances, however, it appears that the Divine law itself permits a departure from the ordinary minister, either at the dispensation of the Church, or from the very necessity of the case. For many things which appertain to Divine positive law admit of dispensation, and may be suspended by the disposition of the Church, or by other circumstances; as appears from the impediments of Matrimony, from the administration of the Eucharist under one kind, from the permission freely accorded in the Old Testament for divorce and polygamy, and other things of the same kind. And thus, not only was this distinction recognised among the ancients, but the Council of Trent also, in some cases, distinguishes between the ordinary and another minister. However, it is safest not to depart too easily from the ordinary minister.

In the ministers is required “an intention of doing what the Church does for, if it be certain that they act but in jest or mimicry, it would appear that, by such an act, they do not really baptise or absolve from sins. And thus, although the person baptising or absolving should be an Atheist, who believed that Baptism was of no effect, his intention of baptising may, notwithstanding, be serious, and this is sufficient. Were it actually to happen, however, that a bad priest should withhold the required intention, even in such a case, although there would be no Sacrament conferred, yet St. Thomas well suggests, that the Supreme Priest will supply its fruit, and

St. Augustine favours this opinion in his book *On Baptism*. But the impiety of the minister is no obstacle to the valid celebration of the Sacrament, provided the other essentials be present.

However, it may also be defended, and not without probability, that if a person acts in such a manner that the act does not appear to others to be done in mimicry, he may be regarded as having an intention, or what is equivalent thereto; and therefore, that such a person, even though he internally resolve the contrary, would seem to have baptised, absolved, and consecrated validly; just as he who knowingly does all that has the effect of conveying to the external senses what is required for an oath, appears, by the very fact, to have taken the oath; as otherwise, it will be in the power of a villain to secure himself from being a perjurer, and all oaths may in effect be eluded. In like manner, then, I think that it is more safe, that it is more in accordance with the Divine institutions, and consults better for the comfort of the weak, to lay down that it is not in the power of the minister to withdraw the will or intention of the mind by a mere internal protest, when that protest appears at variance with the fact. Nor do I think the words of the Council irreconcilable with this.

Some of the scholastics raise a number of discussions concerning the character, or the indelible sign which is impressed on the soul of those who receive the Sacraments of Baptism, Confirmation, or Orders. The question, however, presents no difficulty, if it be only considered that there is acquired, in receiving this Sacrament, a certain permanent quality, the reiteration of which is invalid and unlawful. Even in the civil law, we find examples of similar qualities. For no one can acquire what is already his own; or, in other words, a man who has entire dominion of a thing cannot further acquire dominion of it; and if — by virtue, perhaps, of some prohibitory law — he had no power whatever of alienating it, whether entirely or in part — as the right of the crown, and, in some countries, that

of domain, is known to be inalienable — we should, in that case, have something which resembles the character, that is, which could not be validly reiterated. And since the act of administering the Sacrament — I mean, administering it a second time — is void or null, it is also, by the very fact, unlawful or prohibited; for knowingly to administer a Sacrament invalidly, is a sacrilege, or at least a grievous crime. Now, by Baptism, men are made Christians, by Confirmation they are attached to the Christian soldiery by a new and, as it were, a closer sacramental bond; by receiving Orders they become ministers of the Church. And these, unquestionably, are permanent qualities.

It remains that we explain our opinions regarding the efficacy of the Sacraments in the sense which divines describe by the phrase, *ex opere operato.* And in this question, as in that of the character, I find that the introduction of a new name on the part of the scholastics has laid open to cavil, and exposed to the suspicion of novelty, an opinion which, considered in itself, is plain and intelligible. For indeed, if the Sacraments availed only by the disposition of the recipient, and not by the efficacy of the rite, there would really be no special grace attached to these rites; they would be mere ceremonies, the observance of which, perhaps, is prescribed, and cannot be omitted without crime, but which possess no intrinsic efficacy; because (were it not for the prohibition) whatever good these rites contain, would, with equal certainty, be obtained without the performance of them, by virtue of the general promises which have been made to those who possess faith and charity. In the same way, therefore, as in the Roman law no obligation arose from verbal declarations, and no action could be founded upon a contract, unless a certain form of interrogation and answer were observed (insomuch that the efficacy of this rite might be said to consist *in opere operato*, and not *in opere operantis*), so also may the same be said of Baptism, the entire effect of which is not impressed, unless the essentials of

the rite are observed. In order, however, to receive the grace of the Sacrament, the soul of the recipient must be well disposed, so as that no obstacle may be placed in the way; and thus a certain *opus operantis* (that is, a certain state of the recipient) is indispensable for the *opus operatum* (the efficacy of the rite.)

Let us now speak of the Sacraments in detail, and first of Baptism; — briefly, however, for the controversies agitated concerning it at the present day are neither very important nor numerous. It must be confessed, indeed, that, were the authority of the Church wanting, the practice of Infant Baptism could not be satisfactorily maintained; for there is no precedent for it in Sacred Scriptures: for the Scriptures, besides baptism with water, appear also to require faith in the recipient; and to ascribe faith, as some do, to those who do not possess reason, appears to be excessively precarious and illusory, and to revolt all probability. For, as St. Augustine says in the letter to Dardanus, "If we were to waste words in proving that infants, who know not even human things, have a knowledge of things divine, I fear we should but insult our senses by trying to prove by language a fact in which the evidence of truth passes all the powers and office of language." And hence it seems to me, that those who reject the authority of the Church cannot withstand the force of the arguments of the Anabaptists. In like manner, it cannot be satisfactorily proved from Scripture that Baptism administered by any Christian, even by a heretic, is valid; for the power of baptising seems to have been given solely to the Apostles, and those sent by them, and there is no allusion to any others. And we see that the members of the so-called Reformed Religion have a difficulty in permitting its exercise to any but those who are ministers of the Church. Now it would not be competent to us, it is true, to extend the institution of God further than He has himself signified; but, seeing that the Church, which, by virtue of

the Scripture promises, is "*the pillar and ground of truth,*" has delivered God's will to us, we may rest secure.

Concerning the Sacrament of Confirmation, the existence of which is by some called into question altogether, we find, besides the brief allusions in Sacred Scripture to the rite of imposition of hands, an Apostolic tradition, attested by Cornelius, Bishop of Rome, as cited in Eusebius, by Cyprian the Martyr, by the Council of Laodicea, by Basil, by Cyril of Jerusalem, and by many others of the ancients. The learned are of opinion that it was sometimes administered along with Baptism; nevertheless they were distinct Sacraments. For, after a sufficiently protracted discussion, the Church thought fit to define that Baptism might be administered by heretics and to heretics, but that Confirmation should be administered by a legitimate minister. It was determined, too, that Baptism should be administered to infants as soon as possible; whereas Confirmation might be deferred till the years of discretion. From which it appears, that Baptism, inasmuch as it lays the foundation, is of greater necessity; but that Confirmation crowns the work which Baptism commenced. And hence some of the ancients, alluding to the name of chrism or unguent, are of opinion that it is only on being anointed after Baptism, that a person, by receiving the gifts of the Holy Ghost, becomes fully entitled to the name of Christian, being, as it were, in the language of the Apostle, made a king and priest.

I come to the Sacrament of the Eucharist, upon which the greater weight of the controversy has turned. For there are some persons who, reasoning too freely in judging of the Divine mysteries, and perverting certain words of Chrysostom, Augustine, and others among the ancients, maintain that the Body and Blood of Christ are not really present in the Lord's Supper, but are only represented or signified; because they are as far removed from us as heaven is from earth, and a thing which possesses the true nature of a

body cannot be in more than one place simultaneously. Some, with greater liberality, appear to admit (though not without ambiguity) that we really receive the Body of Christ, but receive it through the medium of the mind, which is raised up to heaven by faith; and that, consequently, as faith alone is the instrument of receiving, the Sacrament is not received by the unworthy — a doctrine which seems entirely opposed to the words of the Apostle. However, this opinion, when its supporters are driven to an explanation, seems, in the end, simply to amount to this, that the mind flies up to heaven, to receive the Body of Christ, only in the same way as we are said to be, in thought, at Rome or Constantinople; for, if they adopt any other explanation, they will be compelled to ascribe to our mind a power which they deny to Christ's Body, viz. that of being in heaven and on earth at the same time. We shall be more secure, however, in adhering closely to the words of the Saviour, who, "*when He had taken bread and wine*, *said*, THIS IS MY BODY." Pious antiquity always recognised in this Sacrament a great mystery which was beyond the comprehension of the human mind; now, if it be a sign that is given instead of the reality, there is no mystery in it whatsoever. And indeed, that every existing Church in the entire world, with the exception of the Reformed Churches, and those which have sunk lower than the Reformers in innovation, admit the real presence of Christ's Body, certain recent writers of eminence have demonstrated with such overwhelming evidence, that we must either admit this to be proven, or abandon all hope that any thing shall ever be proved regarding the opinions of distant nations.

It is true, that if it could be proved by irresistible arguments involving a metaphysical necessity, that the whole essence of a body consists in extension, or the filling a determinate space, — in that case, as truth can never be opposed to truth, it would follow as a necessary consequence, that, even by Divine power, one body could no more be in many places

simultaneously, than the diagonal can be commensurable with the side of a square. And if this were ascertained, it would, unquestionably, be necessary to recur to an allegorical interpretation of the Divine word, whether written or traditionary. But so far is it from being true, that any of the philosophers has perfected this vaunted demonstration, that, on the contrary, it rather appears capable of solid proof, that, though the nature of a body requires that it should be extended, unless an obstacle to its extension be interposed by God, nevertheless the essence of a body consists in matter and substantial form, that is, in the principle of action and passion; for it is the essence of a substance to be capable of acting and suffering. Matter, therefore, is the first passive power, and substantial form is the first act, or the first active power; and though it is true that the natural order of things requires these to be defined by a place of determinate magnitude, yet there is no absolute necessity which requires it.

There are some, who, while they admit the Real Presence, maintain, so to speak, a sort of impanation. They say that the Body of Christ is given in, with, and under the bread. Hence, when Christ said, "This is my Body," they understand it in the same sense as if a person were to exhibit a purse, and to say, "This is money." The records of pious antiquity, however, plainly enough demonstrate that the bread is changed into the Body, and the wine into the Blood of Christ: the ancients, too, universally acknowledged therein a change of substance *(μετασχηματισμον, μετουσιασμον),* which the Latins have aptly rendered 'Transubstantiation;' and it has been defined that the whole substance of the bread and wine is changed into the whole substance of the Body and Blood of Christ. And therefore, here as elsewhere, the Scripture is to be explained from the tradition which the Church, its keeper, has transmitted to us.

Oftentimes, however, as they are not distinguishable by the senses, the name of bread and wine is applied to the remaining species. Thus St.

Ambrose declares the word of the Lord to be so efficacious, that “they at once are what they were, and are changed into another thing;” that is, the accidents are what they were, the substance is changed; — for the same Father says, that after consecration they are not to be believed any thing else “but the Body and Blood of Christ.” And the Roman Pontiff Gelasius insinuates that “the bread is changed into the Body, while the nature of the bread remains,” that is to say, its qualities or accidents; for in those times the forms of speech were not measured in strict accordance with metaphysical notions. And it was in this sense also that Theodoret said, that in this conversion, which he himself calls a change *(μεταβολην)*, “the mystic symbols are not divested of their proper nature.” These expressions may be worthy of notice, as bearing against those writers of the present day, who hold that even the accidents of the bread do not really remain, but only the appearance of them, or an empty and dream-like apparition.

Nor do the accidents of the symbols subsist in the Body of Christ as a subject; they are not sustained in any subject, and the mass itself (which certainly is different from the matter) seems, by the Divine power, to discharge the office of subject for the other accidents. And these principles are wisely laid down by theologians, in order to avoid any thing incongruous in the worship. For if the accidents which belonged to the bread could be predicated of Christ’s Body, it would follow that Christ’s Body was a fragile, round, slender, white thing; it would follow too, that this small, white, round thing — in a word, this thing which has all the sensible properties of bread — was the object of adoration, and that all the indignities which may be offered to the species, or may accidentally befall it, occur to the Body of Christ itself.

It is certain, moreover, that it was the doctrine of the ancients, as appears from the words of Ambrose just cited, that the conversion is wrought by the very act of consecration; nor did any of the ancients ever hear of the novel

opinion held by some now-a-days, that the Body of Christ becomes present only in the moment of communion; for there are well-ascertained instances of persons not consuming this sacred food immediately on receiving it, but sending it to others, and carrying it to their houses, nay even upon journeys and into deserts; and this custom, though it was afterwards abolished for greater reverence, was at one time approved. And indeed, either we must hold (which Heaven forbid!) that the words of institution, as pronounced by the priest, are false, or we are compelled to admit that what is blessed by him is the Body of Christ, even before it is eaten. Not to speak of the difficulties in which the defenders of this opinion embarrass themselves, as to whether the conversion first commences on the lips, or in the mouth, or in the throat, or in the stomach; or, indeed, whether it take place even there, if, through any defect of the organs, the symbols are not consumed.

However, as there are, especially among the members of the Reformed Church, some eminent and acute-minded men, who, deeply imbued with the principles of a certain new and captivating philosophy, imagine, to use their own language, that they understand clearly and distinctly that the essence of a body consists in extension; that accidents are but modes of a substance; and therefore that they can no more subsist without a subject, or be separated from a substance, than uniformity of circumference can be separated from a circle; and as it is from this fancied evidence that their deplorable and almost insuperable aversion for the doctrines of the Catholic Church arises, I think that it is our duty to consult for their malady; and that Catholic philosophers should labour (as the Council of Lateran directed to be done against those who erred regarding the nature of the soul), not only to satisfy the objections clearly and lucidly, but even to establish accurately the contrary doctrine. For they loudly declare, that it is not in the power of any decree of the Church, of any law, in fine, of any authority whatever, to force an individual, even though he be ready to obey, to believe truly and

sincerely a doctrine which is impossible, and which implies, or at least evidently appears to imply, a contradiction. And therefore they protest that the separation from the Church is not to be imputed to themselves, but to them who refuse to receive back those who are separated, save on a condition which to them is impossible.

Our brief limits, it is true, do not permit us to enter at much length into philosophical discussions; but it will be enough for us to observe, in passing, that we too have applied, and that not merely in a perfunctory manner, to the study of mathematics, mechanics, and experimental philosophy; and though it must be confessed that in the beginning we inclined to the very opinions to which we have just alluded, yet we have been compelled, by the progress of study, to return to the principles of the old philosophy. And perhaps, were it permitted to explain the course of our researches, there is no one, except those who are pre-engaged by the prejudices of their imagination, who would not admit that these views are not of that confused and absurd character which is commonly attributed to them by those who despise the received doctrines, and who scoff at Plato, Aristotle, St. Thomas, and other illustrious men, as though they were but children in philosophy.

Certainly, if place is different from the thing placed, or space from a body, so also will matter be different from extension. Now in the case of the former, we are all led by a natural impulse to acknowledge the distinction; and in matter, over and above its dimensions, we conceive a something which the ancients called αντιτυπια *(resistance),* and which we may denominate ‘mass,’ from which thing it arises that bodies do not mutually compenetrate each other, as if they were empty; but, on the contrary, have the capacity of coming in collision, and of being mutually acted upon by one another; and from which it also arises that, in a body of greater mass, the impetus or force will be greater, though the velocity be the same; —

effects which certainly cannot be derived from extension alone. It is also of the nature of a body to act continually by a kind of vibration, to repel other bodies, and to maintain its own place; though this action takes place in the minute particles, and cannot be observed in the greater; for I do not think there exists any substance which is devoid of all ordinary action. And it is from this internal motion that the greater or less connexion of the parts arises, according as their motions harmonise with one another and the external motions in a greater or less degree.

This resistance or mass, and this effort to act, or motive power, are distinct from matter, or the primary power of suffering or resisting, and from substantial form, or the primary power of acting, which others call the first act; because the secondary powers may be limited or increased, while the primary powers remain unchanged; for there is nothing to prevent God from being able to increase the mass or density of the matter without increasing its dimension; as when, for example, He increases the force, its velocity remaining the same. Thus we see that a blow struck by iron is greater than that of wood of the same dimension; and although, in these substances, the difference naturally arises from another cause, — namely, from there being interspersed in the wood a greater quantity of heterogeneous fluid, which is not moved simultaneously, in consequence of which the blow is not struck by all the matter comprised under the dimensions of the wood, — yet I do not see what there can be to prevent God from being able to cause the blow to be greater, though the matter and velocity really remain the same, and to make the bodies differ in specific mass or density, not merely in appearance, but also in reality. Now it certainly is clear that, even naturally, the effort of continuing motion, or the motive power, may be changed without affecting the substance of the body. Here, then, we have two absolute qualities, or real accidents — mass or power of resisting, and effort or power of acting; and these qualities

certainly are not modes of a corporeal substance, but something absolute and real superadded to it; for, when they are changed, a real change takes place, while the substance remains. And, in general, either there must exist real or absolute accidents, which are distinguished from the substance by some other distinctions besides modal ones (as those which we call relations ordinarily are); or every real change must also be essential or substantial — an alternative which will not be admitted even by those who deny the existence of real accidents.

The individual essence of a thing, therefore, or that "which causes it to be that thing, and to remain one and the same through manifold changes," consists in a certain power, or actual faculty or capacity of action — and this a primitive one — which requires certain secondary powers and certain acts, but which may be divested of some of them by nature, and of them all by God, others being substituted in their stead. Now, if the essence of a thing consists in that property, in virtue of which it remains the same, though under different dimensions and qualities, and in consequence of which the essence is not divisible or variable along with its dimensions, or changeable along with its qualities, it follows that it is really distinct from them. Now, regularly speaking, things which are really distinct may be separated by the absolute power of God, and that in such a way as that either the one may subsist, the other being destroyed, or both may subsist, but separately. And indeed, Nature herself, without destroying the essence, takes away dimensions and qualities, and substitutes others in their stead; but there is nothing to prevent God from changing, or even completely intercepting or impeding, this natural substitution, so that the essence may remain, entirely divested of dimensions and qualities. He may also cause the same thing to have different dimensions and qualities simultaneously; or the same real accident to appertain to different substances; and lastly, He may sustain the dimensions and qualities, the thing or essence being entirely

taken away. Nor is it possible to conceive any contradiction in these suppositions; for, if the real distinction be once admitted, the reason is the same for them all; and the existence of substance and of real accidents, and their union, are equally dependent on God's will. And since the nature of things is nothing else than God's ordinary mode of action, it is equally easy for Him to follow the ordinary mode, or to adopt an extraordinary one, according as his wisdom requires. On the contrary, to change modal accidents — those which result by a necessary or metaphysical consequence from real ones — involves a contradiction or an absurdity, and therefore cannot be attributed to God. Of this class are the modes which — as, for instance, relations — arise without any real change, merely from connexion; and therefore such accidents cannot be conceived without absolute subjects to sustain them.

Having explained the mystery of the Eucharist, as far as our powers of comprehension permit, and as far as appeared necessary for the purpose of removing contradictions, it remains for us to speak of the Eucharistic Communion; and in this matter, the first question that presents itself for consideration is one which is known to have occasioned great commotions — that of communion under one or both kinds. There is no doubt, indeed, that Christ instituted the consecration of the bread and wine together, and that He gave his Body and Blood to the Apostles under both species; Paul delivered the same usage to the Corinthians; and the primitive Church, as the Oriental Church does even still, continued to observe it, until by degrees — chiefly through a feeling of reverence, founded, not to speak of other reasons, on the greater liability of the liquid element to perish or to be destroyed — it was ordained, especially in the West, that the species of bread only should be given to the faithful when they communicate, and that the species of wine should be received only by the priest consecrating. This ordinance, however, was not made without the implied sanction of Sacred

Scripture, nor was it without a precedent in the usage of the ancient Church. For there are many Fathers who interpret, as referring to the Eucharist, the supper of Emmaus, in which "*the breaking of bread*" alone is mentioned; and it was customary for Bishops who were in communion with each other, in testimony of fraternal charity, to send one another, even so far as from Rome to Asia, the Eucharistic food, as a pledge of unity of faith and communion; not to speak of the practice of giving the sacred element into the hands of the communicants, to carry with them on journeys, or into the deserts, or to preserve for some other use. And when a practice was introduced, I suppose with the view of preserving both kinds, of taking the species of bread dipped in the wine, Julius, Bishop of Rome about the middle of the fourth century, censured this usage. That it was free, in the fifth century, for individuals to abstain from the chalice, and that many persons did abstain from it, appears from the fact that such was the uniform practice of the Manichees, who were mixed up and concealed among the rest of the faithful; and the Roman Pontiff Leo, with a view to their detection, commanded that both kinds should be received by communicants. In the same see, a short time afterwards, Gelasius repelled from his communion all those persons (a remnant, I suppose, of the Manichees) who received only the Sacred Body, and abstained, through some superstition, from the chalice of the hallowed Blood. In the tenth, eleventh, and twelfth centuries, the custom of dipping the bread began to come into use again, as Cassander shews from the Institutes of the monks of Clugny, from the Council of Tours, and from Yvo; but this arose from reverence, for the Institutes of Clugny allege the awkwardness of the novices as the reason. In some places, in order to prevent the danger of effusion, a sucking instrument was used, as may be proved by authorities; and some of these tubes are preserved even to this day. There were some places, however, in which the chalice was not given to the people; for St.

Thomas testifies that such was the custom of some churches in his time. Cassander, to whom we have already referred, also cites Peter De la Palu and William of Mont le Dun, who testify that communion in both kinds was retained only in some churches, and that in these great caution was used; as also Richard Middleton, who attests that in his age the chalice was given only to the higher among the people, among whom the danger of spilling was less apprehended; as was also done in the time of Thomas Waldensis — a little before the Council of Constance — who tells us that this privilege was granted to kings, prelates, distinguished persons, and the elders among the people; and it is probable that this is the origin of the custom of giving both species to the kings of France, at least at their coronation. At last communion in one kind came universally into use; and in the acts of the Council of Constance, the procurators of the Synod demand that salutary measures be taken for the welfare of the Church, inasmuch as certain priests continue to give both species to the laity.

Nor, indeed, can it be denied, that by virtue of concomitance, as divines say, Christ is received entire under either kind, since his Body is not separated from his Blood. The only question is, whether we may, without sin, depart from the form which appears to be prescribed in Sacred Scripture. And I confess, that if this had been done by private individuals, it would be impossible to acquit them of the charge of grievous temerity; but the usage of the Church, continued for so many ages, proves that, even from the earliest times, it was believed to be allowable to dispense with the use of the chalice, for approved reasons. And there are some Protestants who admit that, if a person have a natural abhorrence of wine, he may be content with the communion of the bread alone. Now, I ask, what more pressing cause can there be than the desire of avoiding schism and of preserving the unity of the Church and public charity? I hold it to be certain, therefore, that

the withdrawal of the chalice cannot supply any one with a just cause of seceding from the Church.

And what the rulers of the Church have done, they have done with a good intention and for a grave reason; for it is certain that, as a liquid is divisible into very minute parts, portions of it may more easily be destroyed, being exposed to the various dangers of being spilled, or of adhering to other objects. And it is for this reason that the form of the bread also has been changed, and, instead of crumbling bread, from which fragments might easily fall off, a different kind has been substituted. But you will ask, why should men fear now-a-days, what neither Christ, nor the Apostles, nor the holy Fathers apprehended during so long a course of centuries? We must hold, in reply, that, as I have repeatedly said, offence and scandal depend in part on the opinions of men. Now it is certain that, of old, men were less shocked by such accidents than they would be at the present day. We are perfectly certain, it is true, that no indignity can occur to Christ and his most sacred Body; and that whatever befalls, reaches only the visible symbols. But now-a-days a much higher degree of outward reverence is shewn even to these elements; especially since the piety of the people has sanctioned the usage of rendering public honours to Christ under the symbols of his Body, — an observance which formerly was less practised; for it is certain that, in sacred rites and in divine worship, some things, which are not essential, vary with time.

Whether it would be better, however, at the present day, to restore the chalice to the people; that is, whether the reasons alleged by so many princes and nations do not outweigh these alleged inconveniences; — to define this, pertains not to private persons, but to the rulers of the Church, and especially to the Sovereign Pontiff, to whom the Council of Trent has left the regulation of this entire matter. Some centuries ago, indeed, several entire nations demanded, and in part obtained, the restoration of the use of

the chalice; as the Bohemians, and the Catholic Greeks in the territory of the Venetians, nay, in the city of Rome itself. And every one knows the solicitations which were addressed to the Sovereign Pontiff and the Council of Trent by the ambassadors of the Emperor, of the King of France, and the Duke of Bavaria, all strictly Catholic princes, as also the concession which the Pope at last made to the prayers of the Emperor; on which Cassander may be consulted. And I should think that if, at the present day, it would be possible, by a similar indulgence, to bring back some nation, or to obtain some great advantage for the Church, it would not be difficult to induce the Pontiff to accede. Meanwhile, though it should happen that the rulers of the Church were perchance to fall into the error of excessive severity, this error would be at their own peril; nor would the crime be imputable to the subjects, whose duty it is to obey in all those things which fall within the legislative authority of their rulers, as it is the duty of the rulers to take care that they use their authority aright. Now, I have no doubt that those who are in authority have power to make laws in such matters as these; and that the faithful are bound rather to obey them, than to give rise to a schism, which St. Augustine shews to be almost the greatest of all evils. Indeed, the Church's power of defining is very extensive, even (though this is only in a certain way) in things which belong to positive Divine law; as appears from the transfer of the Sabbath to the Lord's day, the permission of "*blood and things strangled*," the canon of the sacred books, the abrogation of immersion in Baptism, and the impediments of matrimony; some of which Protestants themselves securely follow, solely on the authority of the Church, which they despise in other things.

The practice of adoring the most holy Sacrament of the Eucharist, though it was not equally in use in every age, has with laudable piety been established in the Church. In every thing appertaining to the external display of worship, the early Christians observed the utmost simplicity; nor

indeed is it possible to censure them in this, for they burned within with true piety of soul. But by degrees, as they began to grow cool, it became necessary to employ external signs, and to institute solemn rites which might serve to remind men of their duty, and to revive the ardour of devotion; especially where there was any great reason or occasion. Now it is difficult to supply to a Christian a greater occasion than is presented in this Divine Sacrament, wherein God Himself renders present to us the Body which He has assumed. For although He is equally present at all times and in all places, as well by his substance as by his aid, yet, as it is impossible for us, at all times and in all places, to direct our mind expressly to Him, and to render to Him perpetual signs of honour, prudence will point out the propriety, in ordering the details of Divine worship, of marking off certain times, places, causes, and occasions. And God Himself, in assuming a human body into the unity of his Person, has given us a peculiar and most signal occasion of adoring Him; for no one will doubt the justice and congruity of adoring God while He appears in the visible form of Christ; and the same must be admitted wherever it is certain that Christ is corporally present (for the Divinity is present in all places and times), even though it be after an invisible manner; now it is perfectly certain that this condition is fulfilled in the most holy Sacrament. Hence, if there be any case in which the practice of adoring may congruously be introduced, it is the case of this Sacrament. And thus it has been justly ordained that the highest solemnity of external Christian worship should be devoted to the Sacrament of the Eucharist; because the object proposed by our Saviour in its institution was to enkindle the love of God, which is the highest act of internal Christian worship, and to testify and nourish charity. For when our Lord, at the last supper, delivered the supreme commands of his last will, He wished that we should remember Him (like all who love and are beloved in turn), and that we should love one another as members of his one Body,

whereof He has made us all partakers. And hence the Church has always employed the Eucharist as the test of unity; and has been careful not to admit to its mysteries, which may be regarded as the inmost recesses of Christianity, any except the proven and purified. To no others, indeed, was it permitted even to be present at the mysteries. It is certain, moreover, that the ancients also adored the Eucharist; and indeed Ambrose and Augustine expressly apply to the adoration of Christ's Body in the mysteries the words of the Psalm, "*Adore ye his footstool*"*]*

And in the end, since the necessity has ceased for deferring to Pagan prejudices, either by concealing the mysteries, or by abstaining from certain external signs, which might offend the weak, or wear the semblance of Paganism, it has gradually come to pass that the most exquisite rites of our external worship have been devoted to this venerable Sacrament; — especially in the West, where there has not been any necessity to consult for the prejudices of the Saracens. Hence it has been ordained, not only that the people prostrate themselves at the elevation of the Sacrament after consecration, but also that when borne to the sick, or otherwise carried in procession, it shall be attended with every demonstration of honour; that from time to time, whether on occasions of a public necessity, or for some other cause, it shall be exposed for adoration; and that, as the pledge of God's presence upon earth, it shall be celebrated yearly by a special festival, with the utmost joy, and, as it were, triumph, of the Church. And indeed the wisdom of these usages is so manifest, that even the Lutherans adore in the moment of receiving the Eucharist, although they go no further, not believing the Body of Christ to be present sacramentally, except in the actual eating thereof: but this we have already shewn to be a novel and incongruous invention.

And when they condemn the institution of the Church, the things which they assail are, in reality, only abuses reprobated by the Church herself, or

some unfounded imaginations of their own. For they charge Catholics with adoring the earthly symbols; and although they admit that the substance of the bread, the absence of which the Church distinctly teaches, is expressly excluded from the object of adoration, they fear, nevertheless, that the species may be adored; and, in addition to this, they allege the uncertainty of the transubstantiation's taking place, either because they believe the doctrine itself to be ill-grounded, or because a bad or invalidly ordained minister may either withhold the intention of consecrating, or may omit the act of consecration altogether. Now, they should be aware that it is not to the species that the adoration is directed; for the whiteness, the taste, the figure, and the other accidents of the bread, do not subsist in the Body of Christ as a subject, nor can they be predicated of it. And therefore, as it is to Christ the adoration is directed, it does not by any means regard this small, round, thin, white thing which has the qualities of bread, much less the whiteness or roundness themselves. Nor, even although it should happen that, in point of fact, the consecration did not take place, would it therefore follow that any idolatry was committed; because nothing else is adored; or, in other words, Christ God is adored, whether his Body be present or not; and as no act of adoration rendered to Christ can be superfluous, it will not matter, even though it should occur that the occasion of adoring Him offered by the supposed presence of his Body should prove unfounded. Hence there is no need for the protest which some persons make, "If thou art Christ, I adore thee; if thou art not, I do not adore thee for, besides that some such qualification is understood of itself, and would be understood even though Christ appeared visibly, it should also be recollected that this white, small, and bread-like object, neither is Christ, nor is believed to be Christ, nor is made an object of adoration. And if it does occasionally occur that the people are not rightly instructed as to the true object of adoration in

this Sacrament, there is no doubt that this is a subject of deep concern to the Church, and that she desires to use every means for its correction.

It remains for us to explain the Sacrifice of the Mass, which the Church has always taught to be contained in the Sacrament of the Eucharist. In every sacrifice there may be distinguished the person offering, the thing offered, and the cause of offering. In this Sacrament of the Altar, the person offering is the priest. The Chief Priest is Christ Himself, who not only offered Himself once on the cross, when He suffered thereon for us, but also perpetually exercises his priestly office, even to the consummation of time, and even now offers Himself for us to God the Father, through the ministry of the priest or presbyter. Hence it is that He is called in Scripture "*a Priest for ever*, *according to the order of Melchisedec;*" for nothing appears to be clearer than that in him, when, according to the prophetic allegory of the Scripture, he is said to "*have offered bread and wine,*" the Eucharistic Sacrifice is prefigured. The thing offered, or the Victim or Host, is Christ Himself, whose Body and Blood undergo immolation and oblation under the appearance of the symbols. Nor do I see what there is wanting here to the true character of a sacrifice. For what is there to prevent that which is present under the symbols from being offered to God, seeing that the species of bread and wine are fit matter for oblation; that the oblation of Melchisedec consisted therein; and that what is contained under them in the Eucharist is the most precious of all things, and the most worthy offering which can be presented to God? Coming to the aid of our poverty, therefore, by this admirable device of mercy, the Divine goodness has enabled us to present to God an offering which He cannot despise. And as He is infinite in Himself, and as nothing else can emanate from us which would bear any proportion to his infinite perfection, no offering could be found capable of appeasing God but one which should itself be of infinite perfection. And in this wondrous manner it comes to pass, that Christ, ever giving Himself

back to us anew in this Sacrament as often as the consecration is repeated, can always be offered anew to God, and thus represent and confirm the perpetual efficacy of his first oblation on the cross. Not that by this propitiatory Sacrifice, repeated for the remission of sins, any new efficacy is superadded to the efficacy of the passion; its virtue consists in the representation and application of that first bloody Sacrifice, which "*perfected all things once;*" and its fruit is the Divine grace which accrues to those who assist at this tremendous Sacrifice, and who worthily celebrate the oblation in unison with the priest. And hence, as besides the remission of eternal punishment, and the gift of Christ's merit unto the hope of eternal life, there are many other saving gifts which we may ask of God, both for ourselves and for others, whether they be living or dead — especially the mitigation of that paternal chastisement which remains due to every sin, even though the penitent has been received back into favour, — it evidently follows that, in the entire range of our worship, there is nothing more precious, or more efficacious in obtaining what we ask, than the Sacrifice of this divine Sacrament, in which the Body of the Lord itself is present. For, provided we come with clean heart to this altar, there is nothing which we can immolate more grateful to God, or of sweeter odour in his sight. And St Bernard well says: "All that I can give is this wretched body; and if that is too little, I add his own Body also." Now the Sacred Scripture itself, as we have already observed, clearly alludes to this sacrifice in the comparison of Christ with Melchisedec, in the hundred and tenth Psalm, and in the Epistle to the Hebrews; not to speak of *the perpetual Sacrifice* mentioned in Daniel and other places. And indeed, it was meet that the Christian religion should not be without a sacrifice; and that as our oblation, which was only prefigured by the sacrifices of the Old Testament, is the most perfect and most worthy of all sacrifices, it should also be permanent and perpetual, as it is insinuated in the Psalm cited above that the priestly office of our High

Priest is perpetual. Indeed, this is the common interpretation of the ancients; and even the early Fathers, Justin Martyr and Irenæus, to say nothing of Augustine and the later ones, applied to the Eucharist the “clean oblation” of which Malachy speaks. Lastly, there are numberless passages of the holy Fathers in which it is declared that Christ is daily immolated in the Sacrament for the people. Thus Augustine calls it “an unbloody Sacrifice Cyril declares that we call “that which is consecrated the Body and Blood of Christ;” and Cyprian, that “in the supersubstantial bread there is both a holocaust and a medicine;” and other passages of similar import are every where to be met with.

When it is said that Masses are celebrated in honour of the Saints, this must not be understood in a cavilling spirit, but according to the mind of those who use the expression. For it is to God alone that the Sacrifice is offered, God’s honour alone is principally sought; nor are the Saints honoured save as friends of God. It is true, at the same time, that, in honour of particular Saints, the Sacrifice is especially and peculiarly celebrated at the time and in the place where we commemorate the praises of the Saint, and implore his prayers and intercession, which derive all of dignity that they possess from Christ’s merit and oblation. But it can no more be inferred from this, that the Divine Sacrifice is offered to the Saint on his festival, or at the altar, or in the basilica which bears his name, than it can be said that the divine office which is celebrated at an election or coronation is dedicated to the king, though it cannot he denied to form part of the honour which is paid him.

Moreover, as the dignity and utility of the perpetual Sacrifice are so great, the usage of offering it very frequently to God for the necessities of the faithful, even though it was not always accompanied by public communion, at last became universal. Of old, indeed, it was the usage that all who were present at the Sacrifice should also partake of the communion;

but, by degrees, the number of communicants was reduced to a few, when the fervour of early piety declined, and well-grounded fears began to be entertained, that too frequent communion and a promiscuous admission of communicants, might lead to a diminution of reverence, and be an occasion of sin to many. For if the faithful, in our own days, were all to approach the table of the Lord after the celebration of the mysteries, who can doubt that numbers of them would eat unworthily? On the contrary, by allowing intervals between the occasions of communion, time is given to those who come to the feast, to prepare, so that they may not be found without the nuptial garment. It would have been wrong, nevertheless, that, because communicants were not always found, the Divine honour should therefore suffer any diminution. Hence, when the laudable and pious practice of daily celebrating the most holy Sacrifice in every church was established, it followed as a consequence, that the communion of the priest who offered was regarded as sufficient. This is the origin of what they call Private Masses; and it is not right that the Church should be deprived of their fruit, which undoubtedly is very great, and that the honour of God should be curtailed by their suppression. For it is not a sufficient reason for requiring the abolition (which would cause the greatest offence to the faithful) of institutions which in themselves are excellent, to allege that the Church existed for a long time without them; neither are we to return entirely to the ancient simplicity in externals; save, perhaps, those among us who may prudently trust that they are able to offer within their hearts the pious fervour which distinguished the first Christians. And would that there were many who could entertain this confidence!

I need not enter at much length into the subject of the admixture of water, of leavened or unleavened bread, of the language in which the Divine office is celebrated, or of the sacred ceremonies which have been piously introduced. For it is certain that the Church has power of legislating on

these matters, provided only that due decorum is observed, and that the people are supplied with means of knowing and understanding all that is said in a low voice and in the sacred language; and in these days there certainly can be no want in this respect, considering the number of books in the vernacular languages, containing a full explanation of the canon of the Mass, and of all that appertains to Divine worship, which have been published.

Having now explained the principal controversies which have been raised regarding the most holy Eucharist, we shall be able to discuss the remaining Sacraments with much less prolixity. Indeed, as regards the Sacrament of Penance, we have already, while treating of the remission of sins and of man's justification, adverted to most of the principles connected with it. For in an adult, when he is reconciled to God, penance is always necessary, whether this reconciliation take place at his first admission into the Church by initiation in the sacred laver, or at his second cleansing from the stains which he afterwards contracted, through the Sacrament of Absolution, to which the name of Penance has been peculiarly attached. And, assuredly, it is a great mercy on the part of God, that He has given to his Church that power of remitting and retaining sins, which she exercises through her priests, whose ministry cannot be despised without grievous sin. In this manner God at once confirms and strengthens the jurisdiction of the Church, and arms it against the refractory, by promising to give effect to her judgments; and hence, unhappily for schismatics, while they despise the authority of the Church, they are compelled also to forfeit her advantages.

Both kinds of remission, that which takes place in Baptism, and that which is received in Confession, are equally gratuitous, equally rest on faith in Christ, equally require penance in adults; but there is this difference between them; — that in the former nothing is specially prescribed by God beyond the rite of ablution, but in the latter it is commanded, that he who

would be cleansed, shall shew himself to the priest, confess his sins, and afterwards, at the judgment of the priest, undergo a certain chastisement, which may serve as an admonition for the future. And as God has appointed priests to be the physicians of souls, He has ordained that the ills of the patient shall be exposed, and his conscience laid bare before them; — whence the wise declaration which the penitent Theodosius is recorded to have made to Ambrose: "'Tis thine to prescribe and compound the medicines, mine to receive them." Now the "medicines" are the laws which the priest imposes on the penitent, as well to render him sensible of past sin, as to make him avoid it for the future; and they are called by the name of satisfaction, because, on the part of the penitent, this obedience and self-chastisement are grateful to God, and mitigate or remove the temporal punishment which should otherwise be expected at his hands. Nor can it be denied that this is an ordinance in every respect worthy of the divine wisdom; and if there be, in the Christian religion, anything admirable and deserving of praise, assuredly it is this institution, which won the admiration even of the people of China and Japan; for, by the necessity of confessing, many, especially those who are not yet hardened, are deterred from sin, and, to those who have actually fallen, it affords great consolation; insomuch that I regard a pious, grave, and prudent confessor as a great instrument of God for the salvation of souls; for his counsel assists us in governing our passions, in discovering our vices, in avoiding occasions of sin, in making restitution, in repairing injuries, in dissipating doubts, in overcoming despondency, and, in fine, in removing or mitigating all the ills of the soul. And if, in the ordinary concerns of life, there is scarce anything more precious than a faithful friend, what must it be to have a friend who is bound, even by the inviolable obligation of a Divine Sacrament, to hold faith with us and assist us in our need?

And although of old, while the fervour of piety was greater than it is now, public confession and penance were in use among Christians, nevertheless, in consideration of our weakness, it has pleased God to make known to the faithful, through the Church, the sufficiency of a private confession made to a priest; and on this communication the seal of silence is imposed, in order that the confession thus made to God may be placed more completely beyond the reach of human respect. And yet, although it is certain that changes have taken place as to the mode of confession at different times, it does not follow that confession, such as the Church has ordered and prescribed it, is on this account less to be regarded as an ordinance of divine law. For there are many things regarding the dispensation of his Sacraments which God has left to be defined and ordained by his Church; — not that the Church can directly cause a thing to be of Divine law, but that God Himself leaves dependent on the disposition of the Church some of the conditions and circumstances of those things which are of Divine law; as we have already explained by the example of the impediments of Matrimony. The same principles, therefore, may properly be applied to the form of that judiciary process which Christ, in granting the keys, has empowered the Church to exercise. For this, at least, is expressly of Divine law, that no one can obtain absolution who contemns the judgment of the Church, and dares to neglect the conditions which she either exacts in confessing, or imposes after confession.

Hence also the Sovereign Pontiff and the Bishops have a power of instituting “reserved cases,” which cannot be remitted by an ordinary priest except in danger of death; and of prescribing penitential canons; and of defining how far the enumeration of the particular circumstances of sins is necessary for the sufficiency of confession; and the culpable neglect of these laws on the part of the penitent would certainly invalidate the

absolution, if it were only on account of the new mortal sin, and therefore impenitence, which is induced thereby.

There still remains this important question, whether, for the Sacrament of Penance, perfect contrition, or the love of God above all things, is necessary, or whether attrition is sufficient. It is admitted, indeed, by all, as we have already observed, that a person who elicits an act of this supreme love, or, at least, an act of contrition founded on a motive of divine love, in which act the desire of the Sacrament is contained either expressly or virtually, is absolved even before confession. Now it must also be admitted that the actual reception of the Sacrament should supply some greater facility to the faithful; and it is in this increased facility that the virtue of this Sacrament principally consists. Hence, all things considered, it appears that, even according to the view of the Council of Trent, it may be said most correctly, that although attrition — or that imperfect penitence which springs not from the pure love of God, but from the fear of punishment or the hope of eternal life, and such other motives — cannot, of itself, lead to justification; yet, that when the Sacrament supervenes, this very grace, that is, an infused ray of the grace of Divine charity, which is equivalent to contrition, and which by virtue of Christ's merit effaces sin, follows in its train; so that the principle remains certain, that Divine love is essential for the justification of the penitent, whether it be obtained by the fervour of the penitent himself, excited and assisted by God, or by the peculiar virtue of the Sacrament.

The works of satisfaction for sin undertaken by individuals, whether by order of a priest or through voluntary piety, have a two-fold virtue; — one of healing the soul and protecting it against relapse; the other, of mitigating the Divine "chastisement which, from reasons of justice, is inflicted, either in this life or in the next. Of the latter we shall speak more fully under the head of Purgatory. And of these satisfactory works St. Gregory the Great

wisely says, “Let him who is conscious of having done things unlawful, study to abstain from some lawful things, that he may thereby satisfy his Creator.” To this head also, from affinity of subject, may be referred those chastisements, mortifications of the flesh, and other useful exercises, or works attended with a degree of pain, which are undertaken, not for the expiation of past, but simply for the prevention of future sin, and for the amendment of the soul. Such works are not to be censured, but, on the contrary, are praiseworthy and commendable; for they produce great fruit, and it is clear from the testimony of Scripture that they are pleasing to God. Nor, indeed, was it without reason that the wise men of the ancient Hebrews said, that “we should draw a hedge or mound, as it were, around the law that is to say, that it is useful to abstain from lawful things, in order to remove ourselves the farther from the confines of things unlawful: and that every man will act wisely in becoming his own lawgiver, and prescribing for himself, as it were, certain forms and observances, or cautions, as ramparts for the defence of his innocence. However, we must avoid all pharisaical notions of sanctity, and place all our trust, not in our own works, but in the grace and mercy of the Lord. For whatever of good we have done was all the gift of the Lord, and a duty which we were bound to render; and however great our payment may be, it will always be imperfect; for whatever remains to us still belongs to God. These observations may suffice upon the Sacrament of Penance.

It is not necessary, for the present, to dwell at much length upon the Unction of the Sick. It is established by the testimony of sacred Scripture, and by the interpretation of the Church, on which pious and Catholic minds will rely with security; nor do I see what there is in the usage, as it is received by the Church, which any one can censure. Though we grant that, of old, it was often accompanied by the gift of cure, and that the recurrence of this, as of other extraordinary favours, has become less frequent, now

that the Church is established; yet we are not to believe that, even of old, the Unction was always attended by a cure. Even still, therefore, there remains at least that perpetual and unfailing efficacy of cure — the cure of the soul itself when duly disposed — to which the Apostle James further alludes in describing the use of this Sacrament, and which consists in the remission of sins and the confirmation of faith and virtue; — graces which are never needed more than amid the peril of life and the terrors of death, in order to repel the fiery darts of Satan which then assail us with their greatest violence.

The Sacrament of Orders, or of the Ecclesiastical Hierarchy, is that by which the ecclesiastical or spiritual office or power, distinguished into its several grades, is conferred on certain individuals, whose ministry God uses for the purpose of dispensing the grace of his Sacraments, and of instructing, ruling, and retaining others in the unity of faith and the obedience of charity, superadding thereto a certain power of jurisdiction, which is comprehended chiefly in the use of the keys. To the hierarchy of pastors of the Church belong, not only Priesthood and its preparatory grades, but also Episcopacy, and even the Primacy of the Sovereign Pontiff; all of which we must believe to be of Divine right. As priests are ordained by a Bishop, the Bishop, and especially that Bishop to whom the care of the entire Church is committed, has power to moderate and limit the office of the priest, so that in certain cases he is restrained from exercising the power of the keys, not alone lawfully, but even validly. Moreover, the Bishop, and especially the Bishop who is called (Ecumenical, and who represents the entire Church, has the power of excommunicating and depriving of the grace of the Sacraments, of binding and retaining sins, and of loosing and restoring again. For it is not merely that voluntary jurisdiction which belongs to a priest in the confessional that is contained under the power of the keys; but the Church, moreover, has power to proceed even against the

unwilling; and he "*who does not hear the Church*" and does not, as far as is consistent with the salvation of his soul, keep her commandments, "*should be held as the heathen and the publican*" and as the sentence on earth is regularly confirmed by that of heaven, such a man draws on himself, at the peril of his own soul, the weight of ecclesiastical authority, to which God Himself lends that which is last and highest in all jurisdiction, execution.

In order, however, that the power of the hierarchy may be better understood, we must recollect that every state and commonwealth, and therefore the commonwealth of the Church, should be considered as a civil body, or one moral person. For there is this difference between an assembly of many and one body, — that an assembly, of itself, does not form a single person out of many individuals; whereas a body constitutes a person, to which person may belong various properties and rights, distinct from the rights of the individuals: whence it is that the right of a body or college is vested in one individual, while that of an assembly is necessarily in the hands of many. Now it is of the nature of a person, whether natural or moral, to have a will, in order that its wishes may be known. Hence, if the form of government is a monarchy, the will of the monarch is the will of the state; but if it be a polycracy, we regard as the will of the state the will of some college or council, — whether this consist of a certain number of the citizens, or of them all, — ascertained either by the number of votes, or by certain other conditions.

Since, therefore, our merciful and sovereign God has established his Church on earth, as a sacred "*city placed upon a mountain,*" — his immaculate spouse and the interpreter of his will — and has so earnestly commended the universal maintenance of her unity in the bond of love, and has commanded that she should be heard by all who would not be esteemed "*as the heathens and the publicans* it follows that He must have appointed some mode by which the will of the Church, the interpreter of the Divine

will, could be known. What this mode is, was pointed out by the Apostles, who in the beginning represented the body of the Church. For at the Council which was held in Jerusalem, in explaining their opinion, they use the words, "*It hath seemed good to the Holy Ghost and to us*" Nor did this privilege of the assistance of the Holy Ghost cease in the Church with the death of the Apostles; it is to endure "*to the consummation of the world,*" and has been propagated throughout the whole body of the Church by the Bishops, as successors of the Apostles.

Now, as, from the impossibility of the Bishops frequently leaving the people over whom they are placed, it is not possible to hold a council continually or even frequently, while at the same time the person of the Church must always live and subsist, in order that its will may be ascertained, it was a necessary consequence, by the Divine law itself, insinuated in Christ's most memorable words to Peter, (when He committed to him specially the keys of the kingdom of heaven, as well as when He thrice emphatically commanded him to "*feed his sheep,*"*)* and uniformly believed in the Church, that one among the Apostles, and the successor of this one among the Bishops, was invested with pre-eminent power; in order that by him, as the visible centre of unity, the body of the Church might be bound together; the common necessities be provided for; a council, if necessary, be convoked, and when convoked, directed; and that, in the interval between councils, provision might be made lest the commonwealth of the faithful sustain any injury. And as the ancients unanimously attest that the Apostle Peter governed the Church, suffered martyrdom, and appointed his successor, in the city of Rome, the capital of the world; and as no other Bishop has ever been recognised under this relation, we justly acknowledge the Bishop of Rome to be chief of all the rest. This at least, therefore, must be held as certain; that in all things which do not admit the delay necessary for the convocation of a general council, or which are not

important enough to deserve a general council, the power of the chief of the Bishops, or Sovereign Pontiff, is, during the interval, the same as that of the whole Church; that he can excommunicate any individual, or restore him to communion; and that all the faithful owe him true obedience; and this obedience extends so far that, in the same way as an oath is to be kept in all things in which it can be done consistently with the salvation of the soul, so also we are to obey the Sovereign Pontiff, as the only visible Vicar of God upon earth, in all things which, after due self-examination, we think can be done without sin and with a safe conscience; insomuch that, in doubt, when all the other circumstances are the same, we must regard obedience as the more safe course; and this we are bound to do for the love of the unity of the Church, and with the intention of obeying God in the person of those whom He has sent. For we should submit to suffer any thing whatsoever, even with grievous personal sacrifice, rather than be separated from the communion of the Church, and give occasion to schism. However, we shall have to speak more fully hereafter upon the primacy and authority of the Roman Pontiff.

All this, however, is to be understood with reservation of the right of earthly powers, which Christ did not abolish; for though Christian princes owe obedience to the Church, no less than the very humblest of the faithful, yet, unless where the law of the realm appears to have provided and ordained otherwise, the ecclesiastical power should not be stretched so far as to arm subjects against their true lords; for the arms of the Church are tears and prayers. And the best and safest line of demarcation between the secular and ecclesiastical power is that drawn by the example of the primitive Church; — viz. that we are bound to obey God and his ministers in preference to the secular power; nevertheless, that we must not resist earthly powers, but that, should they command what is unlawful, we must submit to any amount of suffering rather than obey the command, provided

this can be done without certain injury of the faith. At the same time I do not deny that Christian princes and nations are bound to bestow some, and indeed very great, care upon sacred things; but it must be in such a way as not to put their hand to the ark, or, like Osias, to take the censer, but to content themselves with assisting the Church in more effectually preserving her purity and unity, and in using the right which she herself possesses. If these principles be observed, empire will subsist and flourish within empire — the sacred empire within the earthly — without mixture or confusion. Nor can it be denied that this is a consideration intimately connected with the security of the prince and the loyalty of the subjects, which the discipline of the Christian religion has but served to confirm.

With regard to the distinction between the bishop and the priest, whether, and how far it arises from Divine law, there is but little uncertainty or obscurity in the Church; but Protestants are at variance not only with the Church, but with one another. The Episcopalians in England and Scotland, as we know, defend the prerogative of Divine privilege against the Presbyterians, by the authority of Scripture as well as that of the ancient Church. Indeed, Christ Himself instituted a distinction between the Apostles and the rest of the disciples; after his ascension into heaven, the common consent of Christians retained it, in conformity with the discipline of the Master, and the Church has always held that the Apostles constituted the bishops their successors. Hence Aerius was regarded as a heretic, because he confounded the office of bishop and priest. Jerome, however, appears somewhere to say, that the difference between bishop and priest is of ecclesiastical institution, “more from custom, than from the truth of the Lord’s disposition and in another place he writes, that “what the priest does, the bishop also does.” In another passage, however, he subjoins a limitation: “What is there,” says he, “that the bishop does, with the exception of ordination, which the priest also does not do?” Perhaps, therefore, Jerome

may be explained to mean, that the authority or government of bishops, in the form in which it existed in his time, and in which it exists even at this day, has been received from the Church; but that the ordinary spiritual power, which consists chiefly in the right of ordaining, has, by the institution of Christ, been reserved to the bishops, as it was also reserved to the Apostles. For it is certain that, at a later period, the faculty of administering Confirmation was more easily granted to priests. Because, though we were to suppose that there is nothing expressly contained in Apostolic tradition regarding any power on the part of bishops to excommunicate priests, and to bind, even independently of the concurrence of other priests, those whom priests had loosed; yet, since at least the power of the Church over priests must be admitted to be of Divine right, it would be competent to her to exercise this power through the hands of the bishops; and perhaps it would be her duty to do so, for there does not appear any other fitting medium for its exercise. However, if we suppose that Jerome admitted certain degrees in Divine institution, and that, whenever he regarded the authority of the Church as necessary in order to complete the Divine tradition, he called this by the name of human institution, it would be a liberty which might be pardoned in so great a man, but which is not lightly to be imitated; and it is more simple to say that the bishop and the priest are really distinguished in their functions by the ordinary Divine law. Some things which appertain to election and nomination, however, may be regulated by human authority, provided it be done in accordance with reason and the usage of the Church.

But though the Divine right, in ordinary cases, be held as certain, yet there are many who dispute as to what might be done in circumstances of extreme necessity. They suppose the case of a Christian, whether he be a simple priest or even a mere layman, being cast by tempest on the shore of a remote island, and converting numbers to Christ, but destitute of all means

of communicating with the rest of the Christian world. A question arises, whether this priest can ordain other priests, in order that, upon his death, the new Christians may not be deprived of the benefit of the Sacraments, which are very necessary for salvation. And indeed it is related of Frumentius, that during his mission among the Ethiopians, while he was still a layman, and before he received episcopal ordination, he did some things which were only excused by the necessity. Let it be supposed, then, that the apostle of this nation has not even been ordained a priest, the question is, whether, through the prayers of the new Church to God, he may promise, from on high, for himself and others, the grace of priesthood, and of the Sacraments connected therewith. For it is probable that some of the ancients were of opinion that, in a case of necessity, any Christian whatever had power not only to baptise, but even to sacrifice, as a passage of Tertullian seems to imply. For my part, however, I do not think it either necessary or safe to define these questions by private authority. It is better to leave the supreme care of the Church, and of the souls of the people, to God, whose mercy, confined by no limits, will always do what, under all the circumstances, is best to be done. The safest course, however, is not to depart from the line of ordination, which, through the successors of the Apostles, has carried down the grace of the ministry to us, by uninterrupted propagation.

Last of all, remains the Sacrament of Matrimony, which Christ, the best interpreter of the Divine law, has explained to be, as well by its primitive institution as by the destination both of God and of the contracting parties, the inseparable union of one man and one woman. It is true, nevertheless, that in the Old Testament, polygamy, or the privilege of one man's having more than one wife at the same time, was permitted by Divine dispensation; as was also the power of divorce, entitling married persons to separate and contract a new marriage: but Christ admonished us that this indulgence was granted only because of "*the hardness of men's hearts*," and therefore that

its abolition is more in' accordance with the Divine law. With justice, therefore, has polygamy, which it is no longer possible to excuse on the plea of necessity, been abolished in the Church. But what are we to say of the case of infidel nations, which it might be possible to convert to Christ by the toleration of a long-established usage of polygamy, and among whom it appeared that the refusal of this indulgence was the only impediment in the way of so great a good? For myself, the safer course appears to be to leave this matter to the decision of the Sovereign Pontiff. This, however, I may venture to pronounce, that should the Pontiff deem it expedient to permit the practice of polygamy to the Chinese nation, if it were true that they could be brought to the faith by this means (and it is certain that the Christian law of marriage, which is at variance with the oldest institutions of this people, is regarded by them as one of the chief impediments to Christianity), he would not, in so doing, contravene in any respect the doctrine of Christ. For, as it would be vain to look now for a new revelation, it is fit that he should consult, in the name of God, for the salvation of nations. Hence, considering the precedent of the Divine example, and taking into account the nature of the human heart, I do not think that he would err in tolerating, for the sake of so great a good, an imperfection which God did not regard as intolerable in the Saints themselves; since it is certain that, in this matter, Christ did not so much enact a new law, as propose the true interpretation of the old one.

Difficulties more frequently arise among Christians on the subject of divorce. For oftentimes the parties are necessitated to separate from each other on account of adultery, or other serious causes; and as it is difficult to make them remain continent, it may be asked whether, in order to avoid a greater evil, the Church can permit a new marriage. Some, considering human weakness, and that "it is better to marry than to be burnt" are more disposed to be indulgent, fearing lest men, if too strictly prohibited the use

of marriage, should perhaps peril their eternal salvation. Others admit at least two causes of divorce, properly so called, viz. adultery and desertion; especially as the words of Christ appear to favour it in the case of adultery. But the majority hold that it is not possible to recognise, as sufficiently approved by the Divine law, any ground for dissolving the tie of a marriage which has been ratified and consummated by cohabitation, in such a way that the parties may have full liberty, without any fear of censure, to enter into a new marriage. And the weight of authority at the present day is in favour of this opinion. The opinions of pious antiquity, however, are not uniform as to the amount of indulgence in the observance of his precepts, which God has reserved to Himself and to his Church. For we know that divorce was permitted by the laws of Christian emperors, even by the excellent emperor Theodosius the Great, and others. And yet it is clear from the Council of Milevis, that the Bishops sometimes desired that it should be prohibited by an imperial law. Nevertheless, the Church herself, through fear of incontinence, oftentimes relaxed to some extent in this matter. To pass over the Councils of Elvira, Tribur, and others, which are cited by Gratian, even the great Saint Ambrose says, “It is lawful for a man, if he have divorced a guilty wife, to marry another;” and the decisions of the Roman Pontiffs, Zachary and Gregory, are well known.

The rigid opinion of Augustine, however, which leaned to the more correct and better view, at last prevailed; and the doctrine which had been already expressed in the Council of Milevis, and enforced by the practice of the Church, was confirmed by the Council of Trent, which even retained some of the words. Its canon runs thus: “If any one shall say that the Church errs, when she taught and teaches (according to the evangelical and apostolic doctrine) that the bond of marriage cannot be dissolved on account of the adultery of either of the parties; let him be anathema.” In this decree, however, the Council used a modification, in order not to condemn

those who held the opposite opinion, which is held by several great men, but those only who said that the Church erred therein, and whose pertinacity is deservedly visited with anathema. I do not think, however, that this is to be understood to mean that the Church, which, if very great reasons arose, might tolerate even polygamy, cannot tolerate divorce: but the meaning of the decree is, that, according to the express doctrine of Christ, divorce, no less than polygamy, is contrary to the end of the primitive Divine law, which unites but two into one flesh, and forbids that "*what God hath joined, man should put asunder;*" in such a way, however, that, as Christ Himself testifies, on account of man's hardness of heart or infirmity, a dispensation, in imitation of the Divine example, may be granted for a grave reason, or in a case of necessity; — in the same way as a dispensation may be given in a vow. For, seeing that God has granted much greater things to the Church of Christ, it is not to be supposed that, in this matter, He has denied her any power which is useful or necessary for the salvation of souls, or that He has left her less authority than He granted to the ancients before the coming of Christ; — though He wished that the Church of the New Testament should use this authority of hers with greater caution, and that she should employ all her efforts to recall the faithful from pharisaical observances of the letter and from external justice, to greater purity both of the interior and exterior man, and to the true sense of the Divine law as it has been explained by Himself, not alone on the nature of marriage, but also upon other points. For the faithful should bear in mind that, if they wish to lead a life worthy of Christian holiness, they must, as far as possible, abstain even from certain things which are tolerable in themselves.

In all these things, therefore, it is better to follow the judgment of the Church, and to recognise her power, — a power which is also clear as regards the impediments of matrimony. Hence if the Sovereign Pontiff had granted liberty of divorce to Henry VIII. king of England, and had

sanctioned his contracting a new marriage with Anne, even though it were certain that the first marriage with Catherine had been valid by his predecessor's dispensation; and if, by this compliance, he had preserved Henry's kingdom to the Church; or if the Pope were now to receive the Chinese empire into the faith, by permitting them to retain the usage of polygamy, which, in so vast a nation, it would be impossible to abolish suddenly without the greatest revolutions; or even if the Pope, for a great cause, grants a dispensation in the degrees which, regularly speaking, are prohibited by the law of God and of the Church; — in none of these cases do I think his power of dispensing can be denied, or his prudence censured, without rashness. For although Protestants question the power of the Church in the interpretation of the Divine law, and the dispensation of the Sacraments; and though they especially contend, that marriages in all those degrees which are forbidden in the eighteenth and twentieth chapters of Leviticus, and the twenty-seventh of Deuteronomy, are contrary to a Divine law which does not admit of dispensation, because God pronounces that He punishes the Gentiles for these incestuous connexions; nevertheless, as God has Himself shewn that some of these degrees, or equivalent ones, admit a dispensation (as when He even commands the same woman to be married to two brothers successively, not to speak of his permitting Jacob to marry two sisters at the same time), the Church has, with reason, decided that, at the present day, all the degrees except the first may admit a dispensation where there is a sufficient cause; and the greatness of this cause it is left to the conscience of the rulers of the Church, and of those who seek the dispensation, to determine. The Church can also institute new impediments which invalidate the marriage-contract — a power which the secular authority also claims in some countries; whence, by a law enacted in France, the marriages of children, if contracted against their parents' will, are regarded as null by the law itself; because the legitimate consent of the

contracting parties is the “as-if-matter” of the Sacrament; and it seems to rest with the civil law to determine what shall be a legitimate consent. However, there is no evidence that the consent of parents is required by Divine law for the validity of marriage, though it cannot be disregarded without a grievous sin.

But although marriage is a Sacrament, and although we are bound to consider it as irreprehensible, yet the manifest reasons alleged in favour of celibacy, the consent of nations, and the express words of sacred Scripture, compel us to admit that celibacy, when chastely observed, is more meritorious. For by the observance of celibacy, the mind is at once more free for the contemplation of the things of heaven, and, from the chastity both of soul and body, and their exemption from lust and carnal affection, the offices of religion are performed with greater purity and worthiness. The Church therefore, especially in the West, gradually tended towards, and eventually attained, the establishment of priestly celibacy. The Eastern Church has been more indulgent in this particular. Even in the West, indeed, the matter has involved great difficulty, especially as there are many who shew by their conduct that they really possess not the gift of continence; and hence arose innumerable complaints, partly from the clergy themselves, and partly from the people. And several pious Catholic princes earnestly pressed upon the Sovereign Pontiff and the Council of Trent the expediency of permitting the marriage of priests. Hitherto, however, there have been reasons of great moment which have prevented the desire of indulging from taking effect: and these reasons must be left to Divine Providence, who, sooner than we suppose, can point out more efficacious ways and means for restoring the peace of the Church, and removing the cause of complaint. Meanwhile it is fair that Protestants should consider how many things there are, even in human affairs, which we are compelled to endure, and to which no immediate remedy can be applied; nor are the rulers of the Church to be

accused, because of the wickedness of men or the difficulty of the times. And for the clergy and religious themselves, they should be assured that, in order to the preservation of chastity, scarce any thing else, ordinarily speaking, is necessary but to avoid idleness and evil occasions, and to desire it seriously themselves — a grace which God refuses to no one who asks it devoutly.

Regarding vows of continence, poverty, or obedience, the same is to be said, viz. — that, for the observance of the promise made to God, a good intention alone is required; and therefore the vow of religion cannot be violated without a most grievous sin. The Church, nevertheless, where important reasons intervene, has full power to dispense, or remit, or commute the obligation, in the name of God Himself. However, as the human mind is liable to many infirmities, there is need of the utmost prudence in governing on the part of superiors in religious communities, and of great charity on that of the brethren, in order that discontents may be checked by grateful remedies, and temptations dispelled by pious and agreeable occupations. And as it frequently happens that abuses creep in through the negligence of those to whom this duty belongs; that simple, immature, inexperienced persons are entrapped, through error and fraud, without a Divine vocation; that the superiors are wayward, negligent, proud; the brethren unyielding, harsh, morose, envious, ambitious; and both, sometimes, dissolute, corrupt, and disedifying; it is not strange that, even in religious communities, where they had reason to hope for peace of spirit, so many souls should be involved in the greatest anxieties and miseries, often deprived of consolation, and the very instruments of salvation turned to their perdition — the most miserable fate which it is possible to conceive. It is our duty, therefore, to pray that God may grant good and prudent rulers to his Church, and may preserve long, and strengthen with virtue from on high, those whom He has granted to her, worthy of their office and trust; as

well, that they may know the evils under which the Church most labours, and the remedies which are most required, as that they may have strength and firmness to overcome the obstacles which are thrown in the way of reform by the licentiousness and corruption of the carnal, or the imprudence of the indiscreetly zealous. At the same time, the position which we have already laid down on a former occasion remains undeniable, that if the forces of what may be called the army of the Church be duly marshalled — if the duties, cares, and occupations of clerics and religious be defined, and the laws of their institutes be observed, it is not easy to imagine any thing more beautiful, any thing more excellent, any thing, in fine, more conducive to the Divine glory, the profit of souls, and the exercise of charity.

Having now completed the explanation of the duties of Christians, of the Divine worship, and of the Sacraments, it remains for us briefly to advert to the Last Things, or the future life. Some persons (especially among Antitrinitarians) entertain this most objectionable opinion, that the human soul, of its own nature, is mortal, that it subsists only through grace, and that, after man's death, it sleeps, devoid of all perception and thought, to be resuscitated only on the day of judgment. But true philosophy, as well as revelation, demonstrates the contrary. For our soul is a substance: now no substance can entirely perish, except by a miracle of annihilation; and as the soul has no parts, it is not possible that it should be dissolved into several separate substances; therefore the soul is naturally immortal. Besides, the soul always actually thinks; for it must be held as certain that there is no substance in nature which, even for one moment, is entirely inactive, and devoid either of action or of passion. Now every action and passion of the soul involves thought. The only property which comes from the peculiar ordination of God, and belongs to the economy of his supreme Providence, is, that the soul, in its separated state, retains a memory and consciousness of the events of the past life, so as to be capable of reward and punishment.

But very little, however, can be positively asserted regarding the place, the nature, and the functions, of souls when separate from the body, beyond what God has revealed to us through the sacred Scripture or his Church.

The soul, when, at its parting from the body, it is in a state of mortal sin, and thus ill affected towards God, falls headlong into the gulf of perdition, as if of its own accord, like a weight which has once been detached, and is not afterwards arrested or stayed by an external cause; and being thus alienated from God, it becomes, as we have already observed, the instrument of its own damnation. Insomuch that there are some pious men who believe the hatred of the damned for God to be so intense, that they voluntarily decline to throw themselves upon his mercy, and thus, by their own acts, induce, or prolong, their own eternal misery. And hence we should the less wonder at the severity of the just Judge; nor is there any necessity to recur to the merciful theory devised by Origen, who, affixing his own capricious interpretation to that mysterious passage of Paul, in which it is said that "*all Israel should be saved*," extends the Divine mercy eventually to every creature. Nor can it be denied that there were other holy men not entirely averse to this opinion, especially Gregory of Nyssa. Jerome himself, even when he is, as it were, forced to contradict it, speaks very moderately, and inclines to it at least so far as to say that "the works of the wicked (he is speaking only of Christians, however,) will be proven and purged by fire, the judge's sentence being tempered with clemency;" as if he thought that at least no Christian could perish eternally. But, in men so eminent as these, we must either pardon such opinions, or put a favourable interpretation on them.

But, on the other hand, it is manifest from sacred Scripture, that eternal happiness, which consists chiefly in the enjoyment of the Divine beauty, awaits all who die in the friendship of God. I know that there are some heterodox writers who call in question the beatific vision of God; but their

doubts have no foundation; for even in the present state, God is the light of our soul, and the only immediate external object of our intellect; in the present state, however, we see all things as "in a glass, the ray of thought being, as it were, reflected or refracted by corporeal qualities; whence our thoughts are confused. But in heaven, where our knowledge will be distinct, we shall drink of the fountain of light, and shall see God "face to face." For, as God is the ultimate reason of all things, it follows, as a consequence, that when our knowledge will be à priori, through the cause of causes, we shall certainly see God; inasmuch as our demonstrations will then require neither hypotheses nor experiments, and we shall be able to give reasons, even to the primitive truths themselves.

Many have found a difficulty in the question whether souls arrive at eternal happiness, or even eternal misery, before the day of judgment. Not to speak of more ancient writers, it is known that Pope John XXII. inclined to the negative. And indeed, were it admitted that they do, it might seem that the judgment, the form of which is described by Christ, would be superfluous; nor would it be possible for those who are to be damned to allege any thing in self-justification, if the whole matter were already concluded beyond hope of reversal. However, it is plain, from the very nature of the parable, that Christ there expressed his meaning according to human ideas *[ανθρωπολογικως]*, and that on that last day, when the bodies shall be reunited to the souls, each one's conscience will speak, as well for the accuser and Judge as for the culprit. I confess, however, that in order definitively to determine this and many other similar questions, it is necessary to assume, in addition to the passages of Scripture, that interpretation which is more in accordance with the tradition of the Church.

I cannot venture to impugn the doctrine of a Limbo of Infants, or a place where souls suffer a pain of loss alone, but not a pain of sense; for it is maintained commonly in the Church, by men of the highest piety and

learning, and appears to be sufficiently consonant with the divine justice. Nor can I commend those who, because they themselves know nothing but extremes, imagine that it is so also with God.

There are some who regard the Resurrection of the Body as among the most difficult articles of the Christian faith; and certain cases have been imagined which it is thought impossible to explain upon this supposition. Suppose the case of a cannibal who has lived on human flesh all his life; what, it is asked, will remain to him, when, like the flock of birds to the jackdaw in the fable, the victims shall come to him to claim their feathers; that is, when each one's flesh will return to its first owner? In order to understand this, however, we must be aware that it is false to say that every thing which was ever united to a man's body belongs to its essence; for it is certain that our body is constantly in a state of change, constantly receiving and losing particles, and that, were all the particles that ever belonged to us to be restored, we should he swelled to a thousandfold our actual bulk, and far more. It might be said, therefore, that, in every man there is, so to speak, a certain "flower of substance," the nature of which may be illustrated from the principles of chemists; that this is preserved throughout these numerous changes; and that, although it is contracted in infants, and in adults is expanded by the greater mass of assumed and variable matter which is put on, yet it always subsists, such as it was assigned to each at his birth, neither increased by aliments nor decreased by transpiration; and even though it be granted that this too is dissipated, yet as its value consists in its efficacy, and, as it were, its seminal virtue, and not in its bulk, it may be restored to each individual without loss to the rest. The cannibal, in the case supposed, therefore, will retain his own only, as will those also whom he devoured, without any confusion of the things which God assigned peculiar to each, which are diffused through the entire mass of the body, and remain distinct from what is superadded and held in constant fluctuation. The case might be

solved, too, even without any such hypothesis, if we understand the cannibal who lived on human flesh alone to retain as his own some portion of each of his victims, without any detriment to them; for we have sufficiently refuted the supposition that every thing which at any time belonged to a man's body is restored to him in the resurrection.

Let us dismiss these inquiries, however, and come to the much-agitated question of Purgatory, or temporal punishment after this life. Protestants hold that the souls of the departed are consigned at once either to eternal happiness, or eternal misery. Hence they reject prayers for the dead as superfluous, or reduce them to the condition of idle wishes, such as, rather through human custom than any idea of their utility, we conceive regarding things already past and decided. On the contrary, it is a most ancient belief of the Church, that prayers are to be offered for the dead; that the dead are assisted thereby; and that, although those who have departed from this life may, through the merits of Christ, have been received into favour by God, and, by the remission of the eternal punishment, have been made heirs of eternal life, they continue, notwithstanding, to suffer a certain paternal chastisement or purgation, especially if they have not sufficiently washed out the stain during life. And to this purgatorial punishment some have applied Christ's words about "*paying the last farthing*" and that "*all flesh shall be salted with fire;*" others the passage of Paul, regarding those "*who have built upon the foundation*, *wood, hay*, *stubble*," and "*shall be saved, yet so as by fire;*" others, the passage on "*baptism for the dead*" It is true that the holy Fathers differ as to the mode of purgation. For some were of opinion that the souls are detained for a determinate time (which some extended to the day of judgment, and some even further,) in a certain place, where they undergo a temporary purification. Some held that the mode of chastisement consisted in corporeal fire; some, in the fire of tribulation — an opinion to which Saint Augustine at one time leaned, and which some

Greeks hold even at this day. Some thought the purifying fire was the same, others that it was distinct from the fire of hell. And there were even some who restricted purgatory peculiarly to the time of the resurrection, wherein all, even the Saints, shall have to pass through fire; but those only shall be burnt, or shall suffer loss, whose work is so ill executed as to be liable to injury by fire. However this may be, almost all agreed as to the existence — whatever might be its nature — of a paternal chastisement or purgation after this life, to which the soul, enlightened at its parting from the body, and touched with extreme sorrow for the imperfection of its past life, and for the hideousness of sin, of which it then for the first time becomes fully sensible, voluntarily subjects itself, insomuch that it would not desire to attain to supreme happiness on any other condition. For many writers have well observed, that this affliction of the soul when it reviews its actions is a voluntary purgatory; and, among others, there is a remarkable passage of Lewis of Granada, which afforded great consolation to Philip II. in his last sickness.

APPENDIX.

I. PRIVATE THOUGHTS

UPON THE METHOD OF RE-UNITING THE PROTESTANT AND ROMAN CATHOLIC CHURCHES; COMMITTED TO PAPER, WITHOUT PREJUDICE TO INDIVIDUAL OPINION, BY A THEOLOGIAN SINCERELY ATTACHED TO THE CONFESSION OF AUGSBURG, AND, BY CONSENT OF HIS SUPERIORS, PRIVATELY COMMUNICATED TO THE ILLUSTRIOUS AND REVEREND LORD JAMES BENIGNE, BISHOP OF MEAUX, A PRELATE OF DISTINGUISHED WORTH, NOT LESS EMINENT FOR LEARNING THAN MODERATION, TO THE END THAT THEY BE EXAMINED IN THE FEAR OF THE LORD, BUT WITHOUT BEING FOR THE PRESENT MADE PUBLIC.

PROPOSITION.

The re-union of the Protestant and Roman Catholic Churches is not only possible, but further, is so recommended to each and every Christian by its advantages, both temporal and spiritual, that they are bound upon every fitting occasion, and in every suitable place and time, to contribute, each according to his ability, his own portion to the same, prescribed as it is by divine, natural law, and by express decree in the councils of the empire.

EXPLANATION.

I speak of such a re-union as may take place without violence to the conscience, or prejudice to the reputation, of either party, and so as to leave untouched the principles and hypotheses of both Churches. For since we are commanded in the Scriptures to love and cultivate peace and truth, that is to

say, such peace as may not be repugnant to the truth, far be it from us that, for the sake of obtaining peace and concord in the Church, either party should determine or admit any thing in opposition to conscience, and thus call “light darkness, or darkness light;” but rather let each contend for truth in all things, and in every way reject whatever may be judged to border upon error. But this profession of truth or acknowledgment of error, as the case may be, must so be regulated that no scandal, much less contempt of religion, ensue for the infirm, and that the authority, reputation, and honour of the bishops and doctors of either Church shall suffer no prejudice therefrom; which would be the case if either party were obliged to recant its alleged errors, or, in the method of reconciliation, to admit any thing contrary to the received hypotheses of its Church. Indeed it is plain from the very nature of the case that nothing should be assumed as granted upon both sides which is denied by either, and that the domineering claim for retractation of errors is not even entitled to a thought; but that, on the contrary, the attention of the parties should be exclusively devoted to a lucid exposition, a suitable declaration, or a temperate softening down of the controverted dogmas; and that, should all these fail, or should they be out of place in any particular controversy, they should abstain from recrimination and invective, and reserve the controverted matters for the judgment of a legitimate council. We may hence infer it to be not only expedient, but in its own way lawful, that such errors as do not directly go to subvert the foundations of faith, if they cannot be conveniently and quietly removed, should in the beginning be connived at, and mutually tolerated in weak brethren, according to the laws of Christian charity. In this we are fortified by the example of the Apostles, who, notwithstanding that they knew it to be erroneous in the newly-converted Jews to insist, even under the New Law, upon abstinence from blood and things strangled, nevertheless, because they felt that there was nothing the Jewish neophytes would not do

rather than abandon the practice, not only wisely abstained from denouncing the error, but, for the sake of introducing uniformity as far as possible, by a law passed in the Council of Jerusalem, ordained that the Gentiles should observe the same rule as the Jews. Neither is it to be required from the parties, that, even although a preliminary re-union in the substantial articles should have taken place, either of them should at once subscribe to the opinions of the other in every particular. For perhaps it is not possible, nor is it even strictly necessary, that the general body, whether of our own brethren or of the Catholics, should be hurried from one extreme to the other suddenly and, as it were, in a moment, since Christ and the Apostles, as is manifest from the Gospel history and the Acts of the Apostles, delivered their doctrines not altogether and at once, but by successive degrees.

POSTULATES.

To the attaining the end, therefore, which we have in view, we need only premise six conditions, no one of which is of such a nature that the Roman Church may not, as a tender mother, graciously allow it to her ancient children.

FIRST POSTULATE.

The first is, “That the Supreme Pontiff should consent to hold as true members of the Christian Church, such Protestants as, under fair conditions, to be explained more at large below, are prepared to submit to the ecclesiastical hierarchy and to a legitimate Council, notwithstanding their persuasion that, henceforth and for ever, Communion must be celebrated under both species by their adherents.”

In order that the extreme and indispensable necessity of this condition may be presented more clearly, and that Roman Catholics may see that the

demand of Communion under both kinds is not groundlessly put forward by Protestants, as well as that this demand is reconcilable with the possibility of union, we have to prove —

First. By what an insuperable argument we are convinced that we cannot, with safe conscience, communicate under one kind.

Secondly. How, notwithstanding this opinion of Protestants, it is competent for the Supreme Pontiff, without disturbing any of the hypotheses of his own Church, to receive them into the bosom of the Roman Church, and allow them to retain their custom of communicating under both kinds.

The first is thus proved. Whoever are convinced that the use of the cup as well as of the bread is enjoined by Christ, such persons, if they do not wish to communicate against their conscience, are unquestionably bound to communicate under both kinds. But Protestants are convinced that the use of the cup as well as of the bread was enjoined by Christ. Therefore Protestants, if they do not wish to communicate against their consciences, are bound to communicate under both kinds.

Before we approach the proof of the minor, in order to put the question on a proper footing, we must premise that the word *precept* is understood in a twofold sense:

First, in so far as it commands a thing "*in itself and in its own substance*," by prescribing how the thing commanded, that is to say, the act which is the object of the law or precept, is to be done when it is reduced to action. The schoolmen say that such precepts regard *the specification of the act*. Under these may be classed, for instance, the law of marriage-contracts, by virtue of which two persons are indissolubly united into one flesh. This law does not simply command matrimony, otherwise no one could live in celibacy without sin; but it commands matrimony "*in itself and in its own substance*" by prescribing how the man and woman are to be joined when

they wish to enter into matrimony. To take a woman to wife, therefore, is matter of free will; nor does the law of matrimony oblige every man; but if a man wish to marry, it prescribes that he proceed in this way and in no other, namely, that he take one wife and no more, or, in the words of the Scripture, that "*they he two in one flesh;*" that, once married, he shall continue bound to his wife by an indissoluble tie, and shall remain "*one flesh*" with her; and therefore shall not be at liberty to repudiate her and to marry another, except in the case of adultery, &c. Such also is the provision of the civil law about the seven witnesses and the other solemnities required for the validity of a will — whereby no one is commanded to make a will, but the form is prescribed according to which a will must be framed in order to its being considered valid and lawful.

Secondly, in so far as it commands that a certain act be done, or prohibits that it be done, and in this way has for its object, not the act itself, but the exercise of the act, in which sense the schoolmen say that precepts regard not the *specification* of the act, but its *exercise*.

Suarez insists upon this distinction of precepts in the following words: "It must be borne in mind that in some cases laws regard the performance of an action, and that such laws oblige to the particular act which they prescribe; such, for example, is the law of almsgiving: and that in other cases the law has reference only to the 'specification of the act,' or the manner thereof, in which case, although the law does not oblige to the performance of the act, nevertheless it obliges that, if the act take place, such or such a method be observed; of this character, for instance, is the law of prayer, which, although it does not oblige us to pray at every time, obliges, nevertheless, that if we pray, the act of prayer shall be performed with attention" (De Legibus, b. i. c. 1.)

From which principles it is manifest, that when it is disputed between ourselves and the Romanists, whether communion under both kinds was

commanded by Christ, the question is to be understood of the precept, not as it regards *the exercise,* but as it regards *the specification* of the act.

It is to be remarked, moreover, that as regards the specification of the act, two things are requisite for the precept: first, the determination or sanction of the thing itself considered in itself and in its substance. Thus, in the civil code, for the law which regards the framing of a valid and lawful will, it is requisite to determine the number of witnesses and the other solemnities which belong to the substance of a valid will.

Secondly. It is required that this determination emanate from the will of the superior, which obliges the agent, if he wish to reduce to action the thing regulated by law, and if be mean it to be valid, to do it in conformity with the law made by his superior. Thus, when any one has a mind to make a will, he is obliged to observe the determinate number of witnesses and the other prescribed solemnities, and if these be not observed, or be overlooked or neglected, the will is invalid. Another reason inducing this obligation is the will of the superior by whom the observance of these solemnities has been prescribed.

Beyond these two things, none of the schoolmen have ever noticed any thing as requisite to the precept which regards "the specification of an act."

So much being premised, Protestants, in proof of the minor proposition above mentioned, urge the imperative words of Christ: "*Take ye and eat, this is my Body which is given for you; take ye and drink, this is my Blood which is shed for you.*"

Roman Catholics maintain the negative, and, against our proof of the minor proposition, allege that Communion under both kinds was instituted, but was not commanded by Christ. And here we cannot deny that there is some difference between a precept regarding the exercise of an act, and institution. But the case is different with the precept regarding *the specification of an act*. It is for us, therefore, to prove that between the

precept regarding the specification of an act — that, namely, which prescribes merely in what way the thing is to be done — and *institution*, there is no difference. Which is thus proved:

Whatsoever has all the requisites of a precept considered in relation to the specification of an act, either is such a precept or is equivalent to such a precept. But institution has all the essential requisites of a precept considered in relation to the specification of an act. Therefore institution is either such a precept or equivalent to it.

The major proposition is evident from the terms.

The minor is proved from the definition, and the requisites of the precept considered in relation to the specification of an act.

For according to the definition adduced above, such a precept prescribes the thing in itself and its own substance, by prescribing how the thing commanded should be done, if it be reduced to action. Now to every institution the same is required.

To such a precept it is requisite —

1. That there be a determination or sanction of the thing itself, considered in itself and in its own substance.

2. That this determination emanate from the will of the superior, obliging the agent, if he wish to reduce to action the thing regulated by law, and mean that it should be valid, to do it in conformity with the law made by his superior. Now the like is required in every institution.

This is plain from the induction of all the examples, insomuch that no other example exists or can exist in nature; that is to say, such is the nature of every institution, that when the thing instituted is to be reduced to action, that act must be in conformity with the institution; or if it be not so, even should there be no other precept affecting the same thing, the act in question, by the very fact of its non-conformity to the institution, is to be considered faulty and culpable; which can be proved even by the example

of Christ himself, who, in his reply to the question of the Pharisees, whether a man should be allowed to repudiate his wife for any cause whatever, appeals to the institution of marriage, and proves that such a proceeding is nowise lawful, from the fact of God's so instituting marriage that husband and wife shall be *two in one flesh.* And he thence infers, that the Jewish custom of repudiating wives at will was not only unlawful, but that a man committed adultery who repudiated his wife and married another, except in case of adultery. Now this argument of Christ would have been inconclusive, if institution had not the force of precept, considered in relation to the specification of the act, and did not entail an obligation of such nature, that, when the thing has once been instituted, whosoever, for instance, wishes to enter into matrimony, must do so conformably to the nature of its institution; and, once married, must be and continue "one flesh" with his wife in a bond indissoluble unless by death or adultery.

Thus, also, if any one wishes to take on himself the office of pastor and to teach the word of God in the Church, and undertake the administration of sacraments, he is bound to accept and discharge that office agreeably to the institution of our Saviour. Whoever, in like manner, wishes to undertake and perform the office of a magistrate, must do so conformably to its institution: and the same holds in every institution whatsoever; so that no example to the contrary has ever been alleged, nor, from the nature of things, can any exist.

It follows, therefore, that every institution imports, or is in fact of equal effect with, or equivalent to, a precept of the specification of the act by which the thing instituted is reduced to action or to use. And such is the force of this truth, that it has won the assent of the learned Jesuit, Francis Suarez, who elaborately proves that "every institution of Christ has the force, not merely of an affirmative precept, in the sense that any one wishing to do the thing instituted must do it conformably to the institution,

but furthermore of a negative precept; so that, if the thing cannot be done as it is prescribed, it had better be omitted than done in any other way." (Tert. Pars S. Thom. Disp. xliii. § iv. Conclus, iv.)

Whence we argue as follows for Communion under both kinds: —

To whomsoever it is commanded by Christ that they partake of the sacrament of his Supper according to his institution, to the same is it commanded that they communicate under both kinds. But a precept is given to each and all Christians that they partake of the sacrament of his Supper according to his institution. Therefore command is given to each and all Christians that they communicate under both kinds.

Having now proved the necessity of this postulate, it remains to be proved, in the second place, that it is compatible with the possibility of union, and that in demanding it, nothing is required of the Apostolic See which it is beyond its authority and power to concede; that is to say, the Supreme Pontiff can, without derogating from the principles and hypotheses of his Church, allow Protestants to retain their custom of communicating under both kinds.

Now it is admitted on both sides, that the Pope can, out of the authority reserved to him by the Council of Trent, grant to whomsoever he thinks fit the perpetual and irrevocable use of the cup, provided only this dispensation tends to the advantage of the Christian religion. And the thing, in point of fact, has been already granted by the Roman Pontiff, when, without much difficulty, he allowed the use of the cup to the Bohemians, who were in rebellion upon this subject.

SECOND POSTULATE.

The second condition is, that the Pontiff should be satisfied not to force upon Protestant Churches what are called private Masses, or those Masses

in which the priest alone communicates. This condition is sought, not because Protestants conceive such a mode of communicating to be simply unlawful, since, even in their own churches, their pastors sometimes, in cases of necessity, themselves receive the Lord's Supper without any one else being present; nor because, after the preliminary union, they would forbid their brethren to assist at the private Masses of the Catholics; but for the following reasons: —

1. Because they are convinced that the Eucharist should ordinarily, as far as possible (always excepting cases of necessity), be celebrated after the form which Christ has instituted, and which is described in the Gospel; namely, that, besides the priest, there be present others to whom the Body and Blood of Christ can be distributed with the blessed bread and wine.

2. Because it is notorious that great abuses were introduced into the Church by means of those private Masses, of which abuses, about the beginning of the Reformation, not only the Protestants of Germany, but many of the Roman Catholics also complained, in the *Centum Gravamina;* and that by no means as a matter of form.

3. Because in most Protestant churches there remains not a vestige of the numberless altars intended for such private use; much less have the foundations or trusts devoted by the pious faithful of Christ to such purposes been able to escape the hands of the harpies: all those properties being at present either wasted or applied to other purposes, in part sacred, in part profane.

THIRD POSTULATE.

That the Pope should consent to leave unproscribed and free from all censure, to the aforementioned Churches, their doctrines touching the justification of the sinner before God; viz. that the adult who wishes to become a partaker of Divine Grace, and to obtain remission of sin, and

eternal salvation, should acknowledge his sins, repent sincerely of them, and rely, not upon any merits of his own, but solely upon the death and merits of Christ, with a hope and confidence of obtaining the forgiveness of his sins and life everlasting; and should thenceforth abstain from sin and devote himself to holiness, that is to say, to good works, "*without which no man shall see God.*"

There appears to be no reason why the Roman Pontiff should not leave this doctrine free to members of our profession; especially since, after half a century of contest, the more acute on both sides have discovered that hitherto the dispute has been like the olden contests of the Andabatæ; [Gladiators who fought with their eyes shut.] that between both opinions there is no real difference, but that the contest is purely one of words; and that the controversy, like a saw, has been drawn hither and thither, the quarrel regarding not the matter itself, but the various acceptations of the terms employed. It is true the Catholics usually place the formal notion of justification in the infusion of sanctifying grace, whereas the Protestants maintain that the word 'justification' should be understood in a forensic sense, and as signifying nothing more than the non-imputation of sin in consideration of the merits of Christ. The storms which this difference of opinion has excited in the Church are too well known to require mention; but Calixtus and Horneius, on the side of the Helmstadt theologians, and subsequently, the brothers Adrian and Peter von Walenburch, the Fratres Wallenburgenses, as they are called, and more lately the Capuchin Denis of Werle, in his Via Pacis, published some five years ago with the consent and approbation of his superiors, have all observed that this controversy could be brought to an end by a favourable explanation of the terms.

For, if the term *justification* be understood in so wide a sense as to embrace the idea of sanctification or renovation, and the denomination be thus borrowed from the more noble act of renovation, they hold that the

notion of justification in this extended sense may properly be placed in the infusion of sanctifying grace; but that, if *justification* be strictly interpreted — that is to say, in the sense of *justification* in so far as it is distinguished in its formal essence from the act of renovation (with which it is nevertheless simultaneous) — under such circumstances it does not consist in the aforesaid infusion, but in the sole nonimputation of sin.

FOURTH POSTULATE.

The fourth condition is, that the Pope be pleased to permit to the Protestant pastors the right of marriage, and even of a second marriage upon the death of their wives, until a council shall have decided upon the latter case. In which instance, again, nothing is asked of the Sovereign Pontiff which it is not in his power to grant. For, according to the common opinion, the celibacy of the clergy is not enjoined by positive Divine law, but by human, and is therefore, so to speak, liable to abrogation at the hands of those who made the law. We have in addition the authority of the Council of Florence, by which permission to marry is given among the united Greeks even to priests.

FIFTH POSTULATE.

The fifth is, that the Pope be pleased to confirm and hold for valid the ordinations hitherto performed by Protestants; and to do this in a way which will be acceptable on both sides, will not prejudice either party, and will be calculated to set the faithful at rest, as far as can be done, touching the administration of the sacraments. For as to the future ordinations, which after the preliminary union must be performed according to the Roman rite, there shall be no question. And here we would have it distinctly understood that we are anxious about the sanction of these ordinations, not for the sake of our own brethren, none of whom entertain a doubt upon the subject, but

solely on account of the Roman Catholics, who, without such confirmation, would call into doubt the validity of the sacraments received at our hands after the preliminary union. Whence it is plain that the decision of this article could not be postponed to the meeting of the future Council.

SIXTH POSTULATE.

The sixth is, that the Sovereign Pontiff shall so deal with the Protestant Electors, Princes, Counts, and other States of the Roman Empire, agreeably to the right and authority which in virtue of the Treaty of Passau and the Peace of Westphalia they have, or claim to have, over the clergy and the affairs of religion, that the said temporal lords may not oppose themselves to these religious efforts for union, but may rather be gently induced to promote a design so salutary. And that the Sovereign Pontiff can effect such, and even greater things, is sufficiently apparent from the concordats between the Roman and the French Churches, and from the principles now maintained by the doctors of the Sorbonne, and amongst them by M. Lewis Elias Dupin, in his historical Dissertations upon the Ancient Discipline of the Church, which are no less remarkable for their learning than for their candour.

Should the Roman Pontiff deign to concede these demands, the Protestants who think with us promise on their part:

1. That as the Bishop of Rome holds the first place or primary rank and dignity amongst all the bishops of the Christian world, and consequently in the Universal Church, and possesses besides by ecclesiastical law, in the Western or Latin Church, the primacy and patriarchal privileges, they will, therefore, esteem and reverence the Sovereign Pontiff as Supreme Patriarch or First Bishop of the entire Church, and will pay him due homage in spiritual matters.

2. That they will treat the Roman Catholics as brethren in Christ, notwithstanding their adherence to Communion under one kind and other hitherto controverted articles, until the decision of a *legitimate council*.

3. That the priests will be subject to their bishops, and the bishops to their archbishops, and so on, according to the established hierarchy of the Catholic Church.

Now that Catholics, though communicating under one kind, may be considered as brethren by Protestants who hold Communion under both kinds to be enjoined by Christ, is shewn by two arguments.

1. Because the error of Roman Catholics concerning this article is supposed to be, up to the present, involuntary and invincible. Now such an error, when it concerns a non-fundamental article of faith, can nowise be considered damnable: as is thus proved.

When involuntary deprivation of the whole does not entail damnation, neither does an involuntary and invincible error about a part. But the involuntary deprivation of the Sacrament of the Eucharist does not entail damnation; therefore neither does an involuntary and hitherto invincible error about a part of the Sacrament of the Eucharist cause damnation. Now, an error which is not damnable cannot have for object a fundamental article of faith. But, &c. Therefore, &c.

2. Because, in every case where two divine precepts clash, so that the one cannot be observed without the violation of the other, it is sufficient if that one be observed which is more excellent in itself, and whose observance is more necessary. The celebration of the Sabbath, for instance, which, under the New Testament, has given way to the Sunday, is prescribed in the decalogue, and its violation prohibited. Now it is certain that the works of charity towards one’s neighbour are prescribed not only by the divine, but also by the natural law. Supposing, therefore, that my neighbour is in some extreme calamity, and that he must be freed by me

upon the Lord's day, and that, by the consequent journey and neglect of religious duties, the Sabbath must be violated, — I say that, in such a case, the violation of this first precept is not sinful, because charity to one's neighbour is the more excellent work, and the law enjoining it the more necessary. To apply this to the matter in hand. It is supposed, according to the opinion of Protestants, that Communion under both kinds is commanded by Christ; but, in the opinion of both sides, unity of faith and concord in the Church are commanded, and schism is forbidden as the most grievous evil against Christian charity. The Pope, therefore, according to the supposition that Communion, under one kind, or under both, is left to the decision of the Church, can indulge Protestants with Communion under both kinds; he can also extend to Catholics inhabiting the same country with us the privilege of communicating under both kinds: and thus the actual union of the churches might be commenced. But, on the contrary, in Spain, Portugal, and Italy, for instance, by reason of the exceeding difficulties and the disturbance of the whole religion of Christ which it would occasion, the Pope cannot introduce Communion under both kinds.

It is asked, therefore, what are Protestants to do in this matter? Are they so to act that schism is to be caused, or to be perpetuated? or are the Roman Catholics to be considered as brethren in Christ, although they deny Communion under both kinds to be commanded by him, and although the Roman Pontiff be unable to introduce it into all the provinces of Christendom? I say they must take the latter alternative; because the preservation of unity in the Church and the removal of schism is enjoined by Christ: and this it has, even in our opinion, in common with Communion under both kinds. Now it cannot be denied that the precept of maintaining unity is the more excellent of the two, and that, if both cannot be observed together, the more necessary one should be followed, and toleration should be extended to the error regarding the other. Now the paramount necessity

pf observing Christian charity, to which schism is diametrically opposed, is clearly taught by St. Paul (1 Cor. xiii.) throughout almost an entire chapter.

ON THE COURSE TO BE PURSUED.

A secret and honourable understanding being come to on both sides, the Electors, Dukes, Princes, and other States of the Germanic Empire, Romanists as well as Protestants, shall be invited by the Roman Emperor each to send to the Congress one or two doctors equally respectable for learning and moderation, to confer upon the union of the churches. And in this matter it is self-evident that no deputy should be sent by the temporal lords to this congress, unless such as shall have been privately agreed upon this method of acting, or shall be of like sentiments with those who are so agreed.

In this congress, or conference, setting aside the aforesaid preliminary postulates and private stipulations, they shall proceed to examine the questions, concerning which the opposite parties are not clearly or fully agreed. These, it will appear, are by no means of one kind, much less are they all of equal importance. They may, however, be conveniently distributed into three classes.

FIRST CLASS.

To the first class shall belong those controversies which regard equivocal expressions or diversely received terms — as for instance, Whether the Sacrament of the Altar, or the Eucharist, he a Sacrifice? In deciding which, it is to be observed that there exists no dispute between us and the Roman Catholics as to whether the Eucharist can be called a sacrifice, which is admitted on both sides; but whether it he a sacrifice, properly or improperly so called. Now this, as is plain from the terms, is a controversy about the mode of speaking; since each party takes its peculiar definition of sacrifice

for the foundation of its own opinion. By the Protestants, and even by Cardinal Bellarmine, the term ‘sacrifice,’ conformably to the phraseology of the Old Testament, from which the doctrine of sacrifices is to be drawn, is properly applied to a living thing when, by God’s precept, the animal or animated substance is destroyed by slaying in honour of God. In this sense, the Roman Church denies the Eucharist to be strictly a sacrifice; holding, in common with us, very properly, that the sacrifice in question is completed without a new shedding of blood and a new slaying of the victim, — in one word, and that an ecclesiastical one, that it is an unbloody sacrifice. So far is she from affirming that the Eucharist is a sacrifice in the proper and rigorous sense, according to our definition and that of Bellarmine. On the other hand, when the Romans style the Eucharist a sacrifice properly so called, they adopt that expression either to distinguish it from sacrifices still more improperly so termed, as, for instance, sacrifices of the lips, of the heart, “sacrifices of jubilation,” &c.; or else with reference to the matter of a sacrifice properly so called; for, in the Eucharist, numerically the same sacrifice which was delivered up for us, and numerically the same blood which was shed for us, are really, nay most really, present, and are given and drunk by the communicants; not in faith merely, but by the mouth of the body, though not in a carnal or Capharnaïtic way, but still truly; and thus under this title also the Eucharist merits the name of a sacrifice properly so called. Now, according to this definition of the Romanists, Protestants might allow the Eucharist to be a sacrifice properly so called. From which it is plainer than the noon-day that the debate does not regard the matter itself, but merely the words; and that both parties are agreed in this — namely, that Christ is not slain anew in the Eucharist, but that He is present therein notwithstanding, and that his Body is truly eaten; that thus there is instituted a commemoration or representation of the sacrifice which was once offered for us on the Cross, but which cannot be again offered in the same manner;

and that, according to the different acceptations of the word, it may be said to be a "sacrifice properly so called," or a "sacrifice improperly so called." Matthew Galen, a Catholic writer, in his 13th Catechesis (page 422, Lyons edition), well observes: "*We can thus admit that our sacrifice is not a sacrifice properly and rigorously so called*, but *is notwithstanding perfectly entitled to the name of sacrifice, as being an imitation or representation of that first sacrifice which Jesus Christ offered to his Father*." I shall add, *ex abundantly* a further motive, but without prejudice to the sentiments of others, and always deferring to the decisions of the more learned, that the holy Fathers, in various places, and amongst them Cyril of Jerusalem and St. Cyprian, have not hesitated to call the Eucharist, the one, *a most true and singular sacrifice*, the other, *a sacrifice full of God, to be revered, tremendous, and most sacred,* It might, perhaps, further be granted, that the Eucharist is not only a sacrifice commemorative of that bloody sacrifice in which Christ once offered Himself for us upon the cross to God the Father, and in this sense, according to the definition of the Protestants, a sacrifice "improperly so called but that it is moreover a certain incomprehensible offering of the Body of Christ once delivered for us to death: and, in this sense, a true sacrifice, or if you wish so to speak, a "sacrifice properly so called." St. Gregory of Nyssa says expressly, in his first Sermon upon the Resurrection of Christ: "*By a mysterious kind of sacrifice, which cannot be discerned by man, He offers himself a host for us and immolates the victim, being at once*, *in his own person, the Priest and that Lamb of God who taketh away the sins of the world. But when did He perform this? When He gave his Body to be eaten and his Blood to be drunk by the assembled disciples*, *then He openly declared that the sacrifice of the Lamb was accomplished; for the body of the victim is not yet to be eaten if it have life in it. Wherefore, when He gave his Body to be eaten and his Blood to be drunk by his disciples, the body was immolated in a secret and invisible*

way, as it pleased the power of Him who was accomplishing sacrifices upon the mystery of himself." St. Jerome says: "*The oblation of the Church, which the Lord taught should be offered over the universal world, has been reputed a pure sacrifice by God, and is acceptable to Him. There are offerings in the Old Covenant, and offerings in the New, — sacrifices amongst the people — sacrifices in the church; but the kind only is changed, since it is offered now, not by slaves but by free men.*" St. Augustine: "*Instead of all the sacrifices and oblations*," (meaning of the Old Testament,) "now, in the New Testament, *his Body is offered and administered to those partaking of it.*"

The second Council of Nice says: "*Nowhere has the Lord, nowhere have the Apostles, called the unbloody sacrifice an image, but the Body itself, and the Blood itself.*"

Nicholas Cabasilas, in the explanation of the Liturgy (c. xxxii.), writes: "*It is not the figure of a sacrifice, nor the image of blood, but real immolation and sacrifice.*"

If Protestants were satisfied henceforward to speak thus, in unison with the holy Fathers, I do not see any thing remaining which should retard peace, as far as this point is concerned.

ANOTHER EXAMPLE.

There is a dispute between Roman Catholics and Protestants, *Whether an intention is requisite to the validity of a sacrament*. The Fathers of Trent maintain the affirmative under pain of anathema, and this anathema, from the beginning of the Reformation to the present time, has met with vigorous opposition on the part of the Protestants. In my humble judgment, the controversy will at once be decided if the terms be honestly explained and the matter set in its proper light. I say therefore, with Becanus, that the minister's intention regarding the sacrament may be threefold:

First, an intention of pronouncing the words of institution and performing the external act.

Secondly, an intention of celebrating the sacrament, or, at least, a confused intention of doing that which the Church does or intends. And this intention, as Becanus rightly teaches, may be either, first, *actual;* that is to say, when any one celebrating a sacrament at the same time actually thinks of celebrating the sacrament: or, secondly, *habitual;* that is, when one has acquired by repeated acts a readiness for celebrating the sacrament, such as might be found in those asleep: or, thirdly, *virtual;* when, from absence of mind, the actual intention is not present at the moment, but had been present, and the operation takes place in virtue thereof.

Thirdly, an intention of communicating the fruit or effect of the sacrament. Becanus concludes, that between us and the Romanists there is no difference concerning the third kind of *intention*, namely, that of imparting the fruit and effect, but merely about the first two.

From these premisses the Jesuit whom I have cited infers:

1. That a *habitual* intention is not sufficient for the validity of the sacrament; that, however, an *actual* intention is not necessarily required; and that a *virtual* intention — not only of performing the external act, but of completing the sacrament itself, or, at least, a confused intention of doing that which the Church does, or Christ instituted, is required and insufficient.

2. That an express intention of imparting the fruit of the sacrament is not indispensable to its validity.

Now according to this explanation, it is manifest that the dispute does not regard the matter itself, but merely the word; and that when Protestants deny that the intention of the minister is required for the validity of the sacrament, they refer to the intention of conferring the fruit and effect, which, according to the doctrine of Becanus, the Roman Catholics, as well as we, deny to be requisite; whereas, the latter, who insist upon the intention

of the minister for the validity of the sacrament, speak simply of an actual, or at least virtual intention, of performing the external act, or doing what the Church does in such a case. That such an intention is required for the validity of the sacrament, Protestants are perfectly free to grant to the Roman Church.

ANOTHER EXAMPLE.

There is a question between us, *Whether the sacraments of the New Testament are two or seven in number?* I say, that this also is a dispute about a word, arising from the different definitions of a sacrament in general.

If we understand by the word ‘sacrament’ any thing sacred, instituted in honour of God, according to the idea of St. Augustine, we shall have not seven, but, possibly, six hundred sacraments. If we take the term ‘sacrament’ in a somewhat more limited sense, but not quite so rigorously as when it is applied to Baptism and the Eucharist, there is no question that the remaining five may properly be called sacraments. The question is not, therefore, whether the five which the Roman Catholics add to our two can be called sacraments. For who can deny this in the various senses which are attached to the word by those who variously define it? But the question is, whether they are sacraments in the most rigorous sense of the term; that is, whether they are such sacraments as Baptism and the Eucharist; or, to speak more clearly, whether every thing essentially necessary to Baptism and the Eucharist be found in the sacraments of Matrimony, Holy Orders, Extreme Unction, and the others. Now, in Baptism and the Sacrament of the Altar are required: 1. The word of institution; namely, that it should have been instituted by Christ in the time of the New Testament. 2. The word of promise; namely, that it should have annexed to it a promise of sanctifying grace. 3. That it should have a symbol, or external element: which

conditions no Catholic will say are required in Matrimony, for instance; inasmuch as it neither was established during the time of the New Testament, but commenced from the beginning of the world; nor was instituted (taking the word in its essential signification) specially by Christ, the second Person of the Divinity, but by God; nor has any external element, and far less any accompanying promise of justifying grace.

ANOTHER EXAMPLE.

Another question between the parties is, *Whether sins are truly taken away by justification.* The dispute is easily determined, once the case is properly stated, and the terms employed in discussing the subject duly explained. For it will appear that, on the one hand, there is something in sin which is taken away through justification, according to the admission of the Catholics, and that, on the other, Protestants by no means believe the opposite doctrine, which they are said to maintain.

In order that we may understand this the more clearly, it is to be observed that sins are of two kinds, *actual* and *habitual;* and that in each two things are to be considered, the *material* and the *formal*.

The *material* of actual sins consists in the past act of sinning or the past omission of some act prescribed by the law; the *formal* of actual sins is the guilt and liability to punishment, resulting from the past act of sinning or omission of an act prescribed by the law, rendering man a sinner, and causing him to incur the guilt and punishment resulting from the same before God.

Habitual sins are original sin and the vicious habit contracted by evil doing: the *material* of which is the habitual propensity to evil; the *formal*, as before, the guilt of the sin, and the liability to punishment resulting therefrom.

The question, then, as to whether sins are truly taken away by justification, may be understood as referring either to the *formal* or to the *material* of sin. If it be understood of the *material,* Protestants take the negative side of the question. And, as far as actual sins are concerned, it is plain that the *material* of these sins is not removed by justification. For this *material* consists, as we have said, in the act of sinning which is past, or the past omission of an act prescribed by the law; in which two things are to be considered: first, the act itself committed in opposition to the law; and, secondly, its relation to the sinner, which causes it to be said that he has sinned. If, therefore, actual sins are removed, as to their *material,* by justification, either the previous act is taken away, or the relation of this act to the sinner; so that it will be true to say of him who sinned that he has not sinned. But neither can be said. Not the first; because the previous act, by the bare circumstance of being passed, has ceased to be, and therefore can no longer have any real existence capable of being taken away by justification. The past omission of an act is no real being, but a negation, whose existence cannot be taken away by justification, inasmuch as it has none. Nor can the second be said; for, if the relation of the sinful act to the sinner be taken away by justification, it would follow, that he who had sinned should be considered not to have sinned, and what had been done not to have been done. Thus, for instance, the same man should have fornicated and not fornicated, which is a manifest contradiction. And in this the Roman Catholics, I think, will agree with us.

With regard to habitual sin, its *material,* namely, the habitual propensity to evil, is broken, crucified, mortified, and subdued in the man justified, so that sin cannot reign any longer in his mortal body. However, during this mortal life it is not thoroughly removed, it is not extirpated, but, to a certain extent, remains after justification; for which reason it was St. Paul, although justified, complains so much of sin “that dwelleth in him.”

And when this propensity to evil is broken and lessened in man, this takes place in consequence not of justification, but of regeneration and renovation.

So far, therefore, Catholic and Protestant manifestly agree as to the *material* of sin. If we consider the formal of sin, that is, the guilt and liability to punishment, the state of the question here is, whether the guilt of sin and liability to punishment are removed from the man justified; or whether, in justification, he ceases to be guilty or subject to punishment before God?

The question being so stated, we unite with the Catholics in adopting the affirmative; and hold that sins, whether actual or habitual, as far as regards the *formal*, or guilt and liability to punishment, are truly and entirely removed in justification by remission, condonation, and non-imputation. To this extent again, therefore, parties are agreed. But, as to expressions used by some Protestant theologians, namely, that sin is not taken away in justification, but remains; these are to be understood of original sin, and especially of evil concupiscence, which, they maintain, continues in the regenerated, not formally but materially; that is, so far as regards the habitual propensity to evil, but without dominion.

ANOTHER EXAMPLE.

It is well known what tragedies have been excited in the Church by the proposition which our Luther introduced into the Sacred Scriptures, viz. that "faith alone justifies; although the proposition is not his own, and the doctrine might even be drawn from many other phrases found in Scripture, and admitted by the Church. We are justified, according to the Scripture, "by faith "through faith." Properly speaking, however, it is not faith, but God, that justifies us. Now He has one internal impelling cause of this his justification; namely, his own grace and mercy; one principal external

impelling cause, namely, the merits of Christ; and one secondary external impelling cause, namely, faith. When, therefore, it is said faith justifies, the meaning of the proposition is this: on the part of man, faith is the secondary external impelling cause, moving God to our justification. Whether faith in this sense alone justifies, is the matter in dispute between the parties. Now I think, that if by the word 'alone' the other impelling causes of justification be not excluded — as, for instance, the grace of God and merits of Christ — if we say that the word alone (sola) is not to be confounded with solitary (solitaria), that is to say, dead faith, or faith destitute of good works, or at least of the purpose of doing good, — I think, I say, that in this case the dispute is wellnigh ended. For the meaning will then resolve itself into this: on the part of God, grace and the merits of Christ are the impelling cause of our justification; but, on the part of man, neither hope nor charity, nor any other good work, confer justification proximately and immediately: but in this sense faith *alone* (not, however, *solitary*), that is to say, such faith as worketh by charity, is the external impelling cause of our justification; — that faith, namely, in virtue of which man believes that Christ, by suffering and dying, paid the most ample satisfaction for the sins of the whole world, with an assurance that he shall obtain grace and the forgiveness of his sins from God on account of that satisfaction; a faith, moreover, which is not dead but living, and which works by charity, and manifests itself in action whenever the occasion arises.

ANOTHER EXAMPLE.

Another question is, Whether a man can he sure of his justification and of his final perseverance? Protestants assert both; nor do I think Roman Catholics will dissent from them, if the questions receive due explanation. It is admitted on both sides, that we are justified by faith. A man, therefore, who believes, and knows that he believes, can be absolutely certain of his

faith, and consequently of his salvation. None of our divines, however, teach that a man can be as sure of his salvation and perseverance, as of his justification. For of the latter he can have an absolute certainty, but of his perseverance and salvation, a conditional certainty only; — that is to say, if a man make right use of the means of persevering in faith, does not reject them, and assiduously begs the assistance of God by devout prayers — which he is able to do in virtue of the grace conferred upon him — then he is conditionally certain of his salvation. If this perseverance endure to the end of his life, he is then sure of his salvation also. About an hundred and twenty years ago, Martin Eisengrein, licentiate in theology and president of Ingolstadt, a moderate Catholic writer, endeavoured to soften down the thirteenth canon of the sixth session of the Council of Trent, in reference to this matter, in his curious and comprehensive German work, entitled, "A moderate Declaration of the Articles of the Christian Faith, necessary in the present state of things," printed at Ingolstadt in the year 1568; where, amongst other things, he speaks thus in the fifth paragraph: "I say it in plain German — I also know what I say to be *true and built upon good foundations — however the thirteenth canon of the sixth session of the Council of Trent may sound in your ears*, *this is not its meaning; this is not the decision of the Council; this is not the doctrine of the Church*, *and never was*, *that a* '*Christian never can he sure of his salvation and justification,*'*&c.*"

ANOTHER EXAMPLE.

It has long been sharply canvassed, Whether it he possible to fulfil the law contained in the Decalogue? The question, however, has not been argued upon the merits, but has turned upon the manner of speaking; and therefore it may be decided without any difficulty. The Protestant opinion, if rightly explained, is this: Of the compacts entered into by God with man, one is

legal, and the other evangelical: in virtue of the legal covenant, our first parents, being endowed with the Divine image, were obliged to fulfil the law with the utmost exactness; that is, they were obliged not only to abstain from all sins directly against conscience, but to guard against any concupiscence whatsoever, even indeliberate (in actu primo), or against all those indeliberate evil motions which the schoolmen call primo-primi. By virtue of the Gospel covenant, since man, deprived by his fall of the Divine image, cannot fulfil the law in this way, God requires of him nothing more than that he shall believe in Christ with true and living faith, and shall abstain from mortal sins, or from all that is contrary to conscience. But with regard to venial sins, or concupiscence considered in actu primo, or other indeliberate evil motions, God, in virtue of the evangelical compact, promised that He would not hold the regenerated man guilty of them, provided he begged forgiveness daily and took other similar precautions. When, therefore, it is asked, "whether the regenerated man can and ought to fulfil the law?" I answer, that no one, after the fall of man, is bound to fulfil, or is capable of fulfilling, the law, in the same degree of perfection as the first men were bound to do in virtue of the legal covenant; and if the Decalogue be enforced to the rigour of this legal covenant, I say that no one is bound to its observance, as being a thing impossible. But every regenerated man is obliged to observe the law, in so far as it is exacted of him by the Gospel covenant; and to such extent also has the regenerated man the power to observe the law of the Decalogue by the aid of grace, 'provided only he use his utmost diligence. If the question be so explained, it does not appear what more the Roman Church need look for in the Protestant declaration. Father Dionysius, in his Way of Peace, truly says: "With regard to the possibility of fulfilling the law, there exists in fact and in truth no difference of opinion (between the Protestants and Catholics). Since Protestants teach that many justified by inherent justice, and

possessing the aid of Divine grace, can so far observe and perform the commands of God as not to lose his grace and friendship, or consummate the sin to which he is inclined by concupiscence; but that he is not so perfectly and strictly free from all sin as to avoid every venial sin. Catholics acknowledge likewise that it is our duty to keep the commandments of God and avoid all sin; but they say it is impossible to do so during one's entire life, or for any long time, without a special privilege. (See St. Thomas, 1a 2ae quest, xix. art. 8.) Nay more, the Council of Trent, Sess. vi. can. 23, visits with anathema *any one who says that the justified man can, during his whole life, avoid all sins, even venial, without special privilege from God. Protestants should therefore be satisfied when Catholics teach that the just man cannot so perfectly keep the commandments as not to transgress them somewhat by sinning venially from time to time; and it should be enough for Catholics that it is only in this sense Protestants say the just man cannot keep the commandments of God.*"

ANOTHER EXAMPLE.

There is a question, Whether indeliberate motions (primo-primi), concupiscence "in actu primo" and other sins esteemed venial by us, are against the law of God? The aforesaid Capuchin, whose words we quote, has put an end to this controversy. "Some Catholics say that venial sins are not against the law, in the sense that they are not against the intention of the law; for they are not against the law, in so far as it obliges under pain of losing the grace and friendship of God and incurring His exterminating wrath. This is the first and largest extension of the law. But they are against the law, in so far as it obliges to avoid the smallest offence of God and his chastening wrath, which is its second extension; and they are also against the law so far as it requires to be observed with such exactness as to please God by doing and suffering even out of pure love for him, which is its third

extension. Considered in the first extension, the just man can walk in the law without offence by the grace of God; considered in the second and third, no one, how just soever, can walk therein save by the special privilege of Almighty God, without transgressing by turning aside, although continuing to walk within its limits, as explained in the first sense, and therefore not simply walking and acting against the law, but only under a certain respect. Those, then, who deny that venial sins are against the law, keep in view the first extension of the law; and those who affirm it, the second. And since we are agreed upon the substance, as Gerson says, in his Treatise on the Spiritual Life of the Soul (Lect. v.), it is idle to dispute about words with obstinate animosity."

ANOTHER EXAMPLE.

There is another question, *Whether the good works of the just are in themselves perfectly good and free from all taint of sin?* Protestants deny this; and perhaps so do Catholics, if the thing be rightly explained: for the good works of the justified are said to be imperfect in relation to their imperfect fulfilment of the law. Because, inasmuch as, after the fall of man, no one can fulfil the law as perfectly as he was bound to do by virtue of the legal compact, it is self-evident that the good works of the just must be of such a character as always to fall short of perfection. But, as for those who thence infer that Protestants consider the good works of the just to be mere iniquity and sins; let them know that Protestants consider any such propositions utterly false, although some Protestants, who thought upon these matters more correctly than they expressed themselves, may have adopted those propositions.

ANOTHER EXAMPLE.

It is also asked, *Whether the works of the regenerated are* '*pleasing to God?* And here again there is no substantial difference between us. In order to shew this, it is to be observed that the proposed question admits of a twofold sense; first, whether the good works of the regenerated, considered in themselves, are pleasing to God? Secondly, whether, taken in conjunction with the faith of the doers, or regard being had to all the circumstances, they are pleasing to God? To the question understood in the first sense, answer is to be made, that the good works of the regenerated are not simply and absolutely pleasing to God, because they are not simply or absolutely good, and have their imperfections annexed to them; but that they are pleasing to God notwithstanding, inasmuch as they are conformable to the law; and whatever is conformable to the Divine law is good, and whatever is good pleases God. But if the question be understood in the latter sense, the answer is, that the works of the regenerated are pleasing to God absolutely and simply. For although, considered in themselves, they are imperfect, and although these inherent imperfections cannot be pleasing to God, nevertheless, because they proceed from faith in Christ, and are performed by those who are in Christ Jesus and "*in whom there is no condemnation*," these inherent imperfections are excused in the agents, in consideration of Christ and of his merit which they lay hold on by faith; and therefore their works are pleasing to God simply and absolutely, in the same way as if they were altogether and in every respect perfect, on account of the merit of Christ laid hold on by true faith.

Many other such controversies might be adduced; but these few will suffice as a specimen. For the adjustment of questions of this class there is no need of a new council, general or provincial, but merely that they be discussed by a few unprejudiced, learned, and moderate divines of both sides; and the different acceptation of the terms being seen, the matter can be brought to a conclusion without much trouble in the proposed conference.

SECOND CLASS.

To the second class belong questions, controverted, indeed, but of such a character that the opposite opinions are tolerated in either of the Churches. In such instances, for peace-sake, that opinion should be adopted on both sides which the entire body of one of the Churches and a portion of the other maintain.

FIRST EXAMPLE.

The entire Roman Church approves of prayers for the dead; a part of the Protestant Churches, following the guidance of the Apology of the Confession of Augsburg, has determined them to be lawful; a portion actually does pray for the dead. There are some Protestants, however, by whom this intercession for the dead is not approved. For the sake, therefore, of restoring peace, the Protestants in the proposed congress shall be solicited to consent that their entire Church approve of prayers for the dead.

ANOTHER EXAMPLE.

A portion of the Roman Church holds the immaculate conception of the Blessed Virgin Mary; a portion disallows it. The entire Church of the Protestants, while admitting the blessed Mary to be most holy and full of grace, has decided that she was conceived in original sin; therefore, for the sake of peace and concord, the Catholics in the aforesaid meeting shall be invited to give the suffrage of their entire Church to the latter opinion.

ANOTHER EXAMPLE.

Concerning the merit of good works, there are two celebrated opinions in the Roman Church; one of Vasquez and his followers, the other of Scotus

and all the Scotists. Scotus, the “subtle doctor,” teaches, that the works of the regenerated are not meritorious of themselves, nor intrinsically, but that whatever merit they have is derived from God’s acceptance, and their ordination to reward. Vasquez and his adherents maintain, that the good works of the just do of themselves, without any compact or favour of acceptance, condignly merit eternal life, and that no additional dignity accrues to them from the merits or person of Christ, which they should not otherwise have from the fact of their being done by the grace of God; and further that, although there be a Divine promise attached to the works of the just, yet neither it, nor any other compact or favour, appertains in any way to the principle of the merit. In order to the establishment of peace between the parties, the Roman Catholics must be invited to embrace the opinion of the Scotists — (and how eminent are their schools, how numerous, how celebrated!) — which opinion substantially agrees with that of the Protestants. For Scotus and his companions deny that good works are properly and condignly meritorious; and decide, on the other hand, that they can be called meritorious, only in that loose and extended sense in which one is said to merit who receives any thing from another, although it be gratuitously, and from the mere liberality or free remission of the other. And in this sense the holy Fathers taught that good works are meritorious, and Protestants are perfectly prepared to grant the same; — as Vasquez well observes, when he writes, that Scotus and the others who adopt his opinion agree with the Lutherans in holding, that before the divine promise and acceptance our good works give no title to life everlasting; because the Scotists and Lutherans alike, in reference to works good in themselves, ascribe all the worth of our works to the favour of God and acceptance through the merits of Christ, and also because they take from works the true and perfect principle of our merit, and ascribe the entire virtue of merit to the works of Christ only.” Let this be compared with what the Capuchin

Father, Dionysius, teaches in the 2d, 3d, 4th, 5th, and 6th articles of the second chapter of his Way of Peace, which I have already more than once quoted with honour, and it will appear manifest that, in the controversy regarding the merits of works, there is almost no difference between Catholics and Protestants. The second article of the above-cited author has this title: "Protestants say that good works merit the aid of actual grace and the increase of habitual grace;' the third article, "Protestants teach that good works truly merit degrees of heavenly glory the fourth article, that "*Protestants teach that we may entertain some confidence from good works* the fifth article, "*It is not improbable that the first degree of glory does not fall within the compass of merit* the sixth article, "*The good works of the just*, *in themselves and on account of themselves*, *are not strictly and condignly meritorious*." In fine, the doctrine of the brothers von Walenburch, on the merit of works, is of the same tenor: *That although*, *as regards the grace of justification and the substance of celestial glory*, *there is no merit*, *yet there is as regards the accident or increase*, or, *as they say*, *as regards the second degree of this glory; giving the name of merit in its broadest sense to every act which*, *through the grace of the Holy Ghost*, *is produced by man justified, and to which, although it has no intrinsic worth and no proportion to the reward or to eternal glory, such reward is nevertheless mercifully promised*, *and is truly and properly attained*.

ANOTHER EXAMPLE.

The entire Roman Church teaches *that good works are necessary to salvation.* This some Protestants maintain, others deny. Those who deny it, entertain a concealed fear lest too much should be attributed to good works on the score of justification. But the meaning of those who affirm it amounts to this — that *good works* are necessary to salvation, *not in virtue of their efficacy*, but because their presence is indispensable to salvation;

not as a cause, strictly speaking, of salvation, either principal or instrumental, but as a condition *sine quâ non.* For St. Paul expressly says, *Without holiness*, that is, without good works, *no one shall see God*. Whence it may be argued, That without which no one shall see God, — in other words, without which no one shall be saved, — is necessary in some way to serving God, or obtaining everlasting salvation; but without good works no one shall see God; therefore, &c.

Compare with this the doctrine of the Capuchin in the passage already quoted.

The Protestants are therefore to be invited to unite in adopting the Catholic view upon this point.

ANOTHER EXAMPLE.

The entire Protestant Church is averse to the *adoration of the Host*, through fear of idolatry, not indeed formal, but at all events material. In the Roman Church, some teach that the adoration in the Eucharist has for its object the presence of Christ; some, the presence of the Host. The Catholics, therefore, in the imperial congress, must be invited to make no difficulty of consenting that the object of adoration shall be determined to be, Christ present in the Eucharist.

ANOTHER EXAMPLE.

The dogma of the Ubiquity of the Body of Christ is denied by the Roman Church and several Protestants. Some Protestants maintain it. Such Protestants, therefore, are to be invited in the assembly to give up the ubiquity, and to consent to adopt the opinion of many brethren of their own confession and of the entire Roman Church.

ANOTHER EXAMPLE.

The Churches of the Protestants *objected to have the Vulgate Version forced upon them for authority*. They likewise condemn the canon of the Council of Trent upon the subject. Andrada, the celebrated commentator on that Council, Salmeron, Serrarius, Simeon de Muis, Conti, Giulio Ruggieri, and others, have given it a mild interpretation of the canon.

Simeon de Muis, in his work upon the Hebrew Editions [p. 41], says, "*The holy Council of Trent does not disparage the Hebrew edition*, *when, in its fourth session*, *it decrees that the old and Vulgate edition is to be considered authentic; for in that place it compares the Vulgate with other Latin editions*, *not with the Hebrew*."

Andrada, in the fourth book of his *Defensio Fidei*, holds, *a That the Fathers of the Council*, *in pronouncing the Vulgate edition authentic*, *meant nothing more than that it was without any taint of error from which a dogma pernicious to faith or morals might be inferred; but that they did not so approve the Vulgate in every particular, as to exclude any hesitation or doubt as to whether the translator may have rightly rendered the Scripture*." And he further declares, that he "was so informed by Andrew Vega, Cardinal of Santa Croce, who was afterwards Pope, under the name of Marcellus, and took part in the Council."

Conti (lib. v. Polit, cap. xxiv. prop. 13,) says, quoting from Serrarius, that "*the Latin Version was approved in such a sense, as not to interfere with the authority of the Greek and Hebrew; and that the authority adjudged by the Council of Trent to the Vulgate was restricted to it as a translation, and with these modifications, that it was correct, or rather*, *most correct, and that it has, at least, nothing repugnant to truth, faith, and good morals*."

Serrarius, in his Prolegomena (chap. xix. quæst. 12), says, "*It is sufficiently plain, that a pure fountain must have some advantage over any stream issuing therefrom, how pure soever it may be; for a version is said to be authentic when it is considered to agree with the original* Giulio

Ruggieri, Secretary Apostolic, in the 14th chap, of his Book upon the Canonical Scriptures, asks, "*What pious man is there whose ears could endure to hear that the Hebrew edition, dictated by the Holy Ghost in the very words we read, written by the Prophets, restored by Esdras, cited and explained by Christ, from which all other editions have emanated, as from their parent and fountain, according to which corrections are made, and discrepancies occurring through the fault of editors removed, was now discarded?*"

Many more such writers might be quoted, and especially Simon, in several passages of his *Critical History of the Old Testament;* and if the rest of Catholics agree with these, the controversy as to the authenticity of the Vulgate is entirely decided.

So much for the controversies of the second class, in the discussion of which we are surely warranted in expecting, as we earnestly desire, condescension such as we ask from the theologians of both sides, provided they be men of moderation and zealous for ecclesiastical union.

THIRD CLASS.

To the third class belong those questions at issue between us and the Catholics, which cannot be decided either by the explanaciscan order. The Cardinal of Santa vini, one of the legates of Paul III.

Croce, who became Pope under the at the Council, name of Marcellus, was Marcello Certion of equivocal terms, or by the condescension applicable to questions of the second class, inasmuch as the opinions of the parties appear to be diametrically opposite. As for example —

The Invocation of Saints.
The Worship of Images and Relics.
Transubstantiation.
The Permanence of the Sacrament of the Eucharist beyond the time of actual use.

Purgatory.
The Carrying about of the Host.
The Enumeration of Sins in Auricular Confession.
The Number of the Canonical Books.
The Integrity of the Sacred Scriptures, and the dogma concerning Oral Tradition thereon depending.
The Judge of Controversies.
The Celebration of Mass in the Latin tongue.
The Primacy of the Roman Pontiff by Divine Right.
The Marks of the Church.
The Weekly and Lenten Fasts.
Monastic vows.
The reading of the Holy Scriptures in the vulgar tongues.
Indulgences.
The Difference between Bishops and Priests as of Divine right.

And, what should have held the first place, the Council of Trent itself, and the anathemas pronounced by it, the examination of which, once the preliminary union shall have been secured, may, after the example of the Council of Basil and others, be again referred to the renewed decision of a general council.

The decision of these and such other articles, and especially of such as cannot be allowed to remain undecided without scandal to either party or injury to the Christian commonwealth, and without which a firm and enduring ecclesiastical union cannot be obtained, and certainly cannot be maintained, should either be entrusted to certain arbitrators chosen upon both sides, men conspicuous for learning, judgment, piety, and moderation, or referred to a council. This method of conference by arbitrators met the approval of both parties after the publication of the Confession of Augsburg, and was commenced at Augsburg in the thirtieth year of the last century; and the result was a considerable degree of unanimity upon no small number of subjects, and those not amongst the least important. So much so, that, in writing of this discussion or conference, David Chytræus says, in his *Saxon Chronicle* [book xiii,], that “never from the beginning of

these contests in Germany did the opposite religious parties seem to approximate so closely, or do they ever seem likely, till the end of time, to approach more near." And whatever authority attaches to the judgment or the prediction of the historian on this point, one thing is certain, that out of twenty-one articles of the Confession of Augsburg, fifteen were in a short time settled, the decision of three reserved to a general council, and there were but three upon which a manifest disagreement continued.

If any one have a mind to try what decision can be come to in one or two articles of the third class, to me it is nowise doubtful that a great many of them may be set at rest by an accommodating explanation. Let us now see whether the case be really so.

The main dispute will, as it appears to me, include the dogmas of purgatory, invocation of the saints, worship of images, monastic vows, sacred traditions, unwritten word of God, transubstantiation, the primacy of the Pope, so far as he claims such jurisdiction as of divine right, and his infallibility.

We shall therefore try whether, without prejudice to the opinions of any individual, a portion of the aforesaid controversies may not be brought to a close without the aid of a council, by accommodating explanations. I say, therefore,

OF TRANSUBSTANTIATION, That this question of the mode of the Presence, as far as those Protestants are concerned who admit the real presence and the oral eating of Christ in the Lord's Supper, is of very little importance; and that by Luther at least, provided there were no danger of idolatry, the error was considered trivial, and the subject was regarded as belonging to the class of sophistical questions. As regards the question itself, Protestants allow that by consecration some change takes place in the elements of the Eucharist; but they usually maintain that this change is merely accidental, so that the substance of the bread is not changed; but,

from common and ordinary bread, it becomes a sacred bread, bread devoted to this most sacred use, a bread which, in its actual use, is the communication of the body of Christ. Amongst Protestants, M. Drejer, Professor of Königsburg, admits, in a certain sense, a substantial change. I do not myself adopt this opinion; but I think I should say nothing against the analogy of faith in supposing that, by virtue of the words of institution, some mysterious change takes place in the Lord's Supper, by which, in a manner inscrutable to us, this proposition, so frequently affirmed by the holy Fathers, becomes true, namely, "*The Bread is the Body of Christ.*" Roman Catholics are therefore to be invited, for peace-sake, in the proposed convention, to abstract from the mode of transubstantiation in the Eucharist, and to be satisfied to say with us, that this mode is incomprehensible and inexplicable, but of such a character that, by means of some hidden and wonderful change, the bread becomes the Body of Christ; and on the other hand, those Protestants to whom this may appear new, must be invited to imitate the first Reformers in waiving all objection to such propositions as, *the Bread is the Body of Christ*, *the Wine is the Blood of Christ;* and to reflect besides, that these propositions were of old so universally considered true, that scarce one of the early doctors of the Church is to be found who has not taken delight in these or similar expressions concerning the Eucharist.

OF THE INVOCATION OF SAINTS.

With regard to the invocation of saints also, the danger alleged by Protestants will disappear, if the Romanists publicly protest that they put no trust in departed saints beyond what they repose in those living friends whose intercession they implore; and that their prayers, all and each, in whatsoever words or form conceived, are to be taken in no other than an intercessional sense. So that, for instance, when they say, "*Holy Mary, free*

me in the hour of death!" they mean, "*Holy Mary*, *intercede for me with your Son*, *that He may free me in the hour of death!*" If, in addition, the Romanists would teach their brethren, that the invocation of saints is not strictly prescribed by the Council of Trent, but that it is left to each one's discretion whether he address his prayers direct to God or through the saints; that we need not invoke the saints at random and without necessity; but that it is to be done especially on those occasions when, on account of some grievous sin, a man, in his apprehension of the wrath of God and his sense of humility, dares not raise his eyes or direct his prayers immediately to God; that moreover, prayer directly addressed to God is far more efficacious than any to departed saints; and that the most perfect prayer of all is that which, as far as can be, leaves every creature out of view, and dwells in the depth of the divine attributes.

Indeed, if the thing be so explained, I do not see what more need be required in those prayers, unless perhaps this; that, since we are uncertain whether every saint in particular is acquainted with our special need, the assurance of our being heard must always be doubtful. Whether the doubt can be removed by adopting the form, "Holy Mary, if thou knowest my misery, pray for me." let others decide: I suspend my judgment. We venture meanwhile to anticipate with earnestness that the stronger forms of addressing the saints, which are as displeasing to moderate Catholics as to us, will be given up; we mean such as are to be found in the "Psalter of Mary," the "Novena of St. Anthony," and other monastic formularies. It should be enough for Protestants, however, that these forms, in whatever way they are expressed, are understood to imply intercession merely. And should this interpretation chance to appear to any of our brethren to be somewhat forced, I pray them to reflect that such methods of speaking and such explanations are not unusual in common life. Suppose, for instance, a thief or robber thrown into prison should address the prime minister of the

king or prince in these words: “Free me from the misery of this dungeon “Remove from me the sentence of death;” the thief or robber in question knows very well that the prime minister of the king or prince has no such power, but that it rests with the king or prince alone to do so; and therefore his prayer is, in effect, no other than that the minister should intercede with the king to liberate him from prison or save him from death.

OF THE WORSHIP OF IMAGES.

With regard to the worship of images, we shall also come to an understanding easily enough, if those excesses which even more moderate Catholics condemn in their fellows be moderated. In truth, it is plain that images have no intrinsic virtues, and that therefore they are neither to be adored, nor ought men to pray before them, unless in so far as they be considered visible and striking methods of bringing to mind the recollection of Christ or heavenly things. That some Roman Catholics, chiefly in Italy, Bavaria, and the hereditary provinces of the Roman Emperor, do pay to images, especially those which are considered miraculous, a sinful worship, is too notorious to appear to admit of contradiction. Should any one, therefore, be anxious to worship or invoke God in presence of an image, let him observe the same moderation as did the Israelites of old, who contemplated the brazen serpent with a certain reverence, yet so as to make God, and not the image, the object of their faith. And let all such excess of ceremonies be avoided, as is calculated to suggest, if not to the learned and prudent, at least to the more simple people, an idolatrous idea, or one akin to idolatry, as though some divine virtue existed in the image.

OF PURGATORY.

I can discover nothing which can or should be said on the part of the Protestants in congress on this subject. However, if the question be allowed,

as St. Augustine treated it, to stand a problem in the schools, and if no one be obliged to adopt the affirmative or negative, I cannot perceive what injury should result to the Church. For my own part, I should have no objection to anyone wishing this doctrine to be received as a problem.

OF THE PRIMACY OF THE POPE AS OF DIVINE RIGHT.

That, after the preliminary reconciliation, the primacy may and can be allowed by Protestants to the Roman Pontiff, so far as he is entitled to it by the canons or of ecclesiastical right, we have shewn above. But whether the Pope be head of the Church by divine right, and, moreover, infallible, either in council or out of council, are questions of a higher range. Indeed, if the doctrine which the writer already quoted, Lewis Elias Dupin, Doctor of the Sorbonne, has most learnedly advanced in the fourth, fifth, sixth, and seventh dissertations of the work above cited, could meet the approval of ultramontane Catholics, as it does of Protestants, I should say that the whole affair was settled, or at least, that the Protestants fully agree with the French Church.

OF THE MONASTIC STATE AND VOWS.

Concerning the monastic state and vows, in the proposed conference, it will be easy to come to an agreement, as there still remain monasteries among the Protestants, in which the canonical hours may be sung, and the Breviary read, just as is done, for instance, among the Cistercians, with the exception of the collects or little prayers addressed to deceased saints; and in which the fasts and distinction of meat can be observed, and celibacy, hospitality, the rule of St. Benedict, and other things savouring of the ancient institution, may be practised. Nor can any Protestant, with reason, condemn even the vow of obedience. As to the vow of poverty, whereby monks, who are entirely their own masters, renounce their property without prejudice to

the right of any third person, it is plain that such a matter is indifferent in itself, and therefore cannot be unlawful. The only question is in reference to the vow of chastity, inasmuch as no one can bind himself by vow to what is impossible. Celibacy may indeed (as it is faithfully practised in some Protestant monasteries) be promised, not by vow but by oath. That, however, must be in what is called a "composite sense so that, as long as one means to continue a monk or member of a monastery, he shall be bound to live in celibacy; but if he either cannot, or will not, do so, he may withdraw, should he think fit, and return to the world at his own peril.

OF TRADITION.

Concerning traditions, or the unwritten word of God, how many contests have we not had in the Church! Yet it is, notwithstanding, a matter easily settled, provided we say that the controversy between us and the Catholics is, not whether there be traditions, but whether the Church has thence received any new article of faith necessary to be believed under pain of forfeiting eternal happiness, which article is not to be found in Scripture, either in so many words or by fair deduction. Protestants deny the latter, not the former; and the more moderate amongst them allow, not only that we owe the Holy Scriptures to tradition, but that the genuine and orthodox meaning of Scripture in the fundamental articles — not to speak of many other things enumerated by Calixtus, for instance, and Horneius, and Chemnitz, of our own religion — are only to be known from tradition. In sooth, those Protestants who, besides the Apostles' creed and that of St. Athanasius, admit the first five general councils, together with the synods of Orange and Milevis, and the consent of the primitive Church, at least during the first five centuries, if not longer, as secondary principles in theology — in such sort that the fundamental articles are not to be explained otherwise than they were by the unanimous consent of the learned in those ages, —

such Protestants will have very little matter of dispute with the Roman Church on the score of tradition.

So much on these questions by way of specimen, in order that it may appear how easily many controversies might be adjusted by explanations or moderate views, provided neither party should make the opinion of his Church a point of honour, or place an obstacle in the way of such pious efforts by a zeal not according to knowledge.

OF THE COUNCIL.

Should any thing remain undetermined by the arbitrators, recourse must be had to a Council, which 1. Should be legitimately convened by the Sovereign Pontiff, and should be of as general a character as circumstances will permit.

2. The said Council should not appeal to the decrees of the Council of Trent, or of other Councils in which the dogmas of the Protestants have been condemned under anathema; neither 3. Should this Council be convened without certain previous stipulations, and the previous fulfilment of every thing which, in this or any similar plan, may be laid down as necessary to be fulfilled and agreed upon; as for example.

i. The acceptance of the postulates by a laudable condescension [συγχαταβασιν] on the part of the Sovereign Pontiff; in which consists the removal of the six most important obstacles by which the peace of the Church has been hitherto impeded, and by which, unless they be removed in this or some similar way, it will be impeded to the end of time. ii. A previous congress, to be appointed by the Emperor, and a successful termination of its sessions. iii. The admission of Protestants into the bosom of the Roman Catholic Church, notwithstanding the difference which may still subsist respecting Communion under both kinds, and the questions

which may be left to be determined in the future Council. iv. In the said Council every thing should be done according to the canons, and especially no one should be suffered to vote except a Bishop. Whence it is plain that, before its celebration and immediately after the preliminary union, for the sake of perfect uniformity with the Romanists and full assurance of the reconciliation which has taken place, it is necessary that his Holiness should confirm, and recognise as true Bishops, all Protestant Superintendents, who shall be summoned, together with the Roman Catholic Bishops, to this General Council, and shall sit and vote freely in the same, not as a party, but co-ordinately with the Roman Catholic Bishops, as competent judges.

v. Such a Council should have for basis and rule the sacred canonical Scriptures of the Old and New Testament, the consensus of the ancient and primitive Church during at least the first five centuries, and also the consensus of the present patriarchal sees, as far as the circumstances of the times will allow its being ascertained. vi. In such a Council the disputation should be carried on by doctors, and the bishops should decide by plurality of votes; attending, however, beyond all things, to the excellent admonition of St. Augustine, in his book Contra Epistolam Fundamenti, c. 1: “Let every kind of arrogance be laid aside by both parties; let no one say he has already discovered the truth; let it be sought in the same way as if it were unknown to both. For thus the inquiry shall be made with concord and diligence, if the truth be not, with rash presumption, believed to be discovered and known.” vii. After the close of the Council and the publication of the canons, both parties shall be bound to acquiesce in the decisions therein adopted: he who shall do otherwise, must suffer the penalties adjudged by the canons.

CONCLUSION.

From these premises follows the demonstration of the proposition with which we commenced, —

If the Sovereign Pontiff be willing and able to grant to the Protestants these six preliminary postulates:

If, in the imperial Congress, the controversies of the first class, which regard the mode of speech, be decided:

If in this Congress, in all controversies of the second class, each Church will embrace that doctrine which is held by a portion of its own members, and by all the members of the other:

If questions of the third class can be brought to a close either by modifications on the part of the arbitrators, or by the decision of a general Council:

It follows that a re-union of the Protestant and Catholic Churches is possible, without prejudice to the principles, hypotheses, and reputation of either.

Now, from what we have already proved, the antecedent is true; Therefore the consequence is true. Which was to be proved.

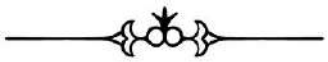
"Now the God of patience and of comfort grant you to be of one mind towards one another according to Jesus Christ, that with one mind and with one mouth we may glorify God and the Father of our Lord Jesus Christ." (Rom. xv. 6, 7.)

"May the same sanctify us in His truth by His Holy Spirit. His speech is truth. Amen."

Written at Hanover, in the months of November and December 1691.

II. THE DECLARATION OF M. FABRICIUS

DOCTOR AND PROFESSOR OF DIVINITY, FORMERLY AT ALTDORF, AND NOW AT HELMSTADT,



THAT THERE IS NO ESSENTIAL DIFFERENCE BETWEEN THE CONFESSION OF AUGSBURG AND THE CATHOLIC RELIGION, AND THAT SALVATION IS ATTAINABLE IN THE LATTER AS WELL AS IN THE FORMER. PUT FORTH ON OCCASION OF A PROJECTED MARRIAGE BETWEEN A CATHOLIC KING AND AN EVANGELICAL PRINCESS. A.D. 1707.

THE question, "Whether a princess professing the Evangelical-Protestant religion can, with a safe conscience, in consideration of intermarriage with a Catholic king, embrace the Homan Catholic faith?" cannot be well and solidly resolved without first satisfactorily resolving the question, whether Roman Catholics are in error upon the fundamentals of faith and the essentials of salvation; or, what is the same thing, "whether the creed of the Roman Catholic Church be so constituted as to render it possible to hold therein the true faith and to attain salvation."

To the latter question it is impossible to return a negative answer, and that for three reasons.

I. First, because the Roman Catholics are agreed with us in the fundamental grounds of faith and practice, or hold the doctrines which are essential to the Christian profession.

For, in our view, the fundamental grounds of Christian faith and practice consist in the belief in God the Father who created us; in God the Son, the Saviour and promised Messiah, who has redeemed us from sin, death, the

devil, and hell; and in the Holy Ghost, who enlightens and sanctifies us; in the Ten Commandments, which teach us our duty to God, to our neighbours, and to ourselves; in the knowledge of the Lord's Prayer, or Our Father, which teaches us how to pray; in the use of the Sacraments of holy Baptism and the Lord's Supper, conformably to the institution and precept of Christ; to which is added the Office of the Keys, which we believe to have been entrusted to the Apostles and their successors; that is to say, we believe that power has been granted by Christ to the ministers of the Church to declare to the penitent the merciful remission of their sins, and to the impenitent the wrath and vengeance of God, and thus to loose the sins of the former, and to retain those of the latter; and, in accordance with this institution, we occasionally approach the confessional and confess our sins, in order to be absolved therefrom.

Whosoever believes and practises this, possesses the fundamentals of faith and of salvation, and thus may obtain eternal happiness. Upon this foundation must the learned, as well as the unlearned, live and die, if he would be a Christian and child of God, and an heir of the kingdom of heaven.

Now all this is found in the Lesser Catechism; for it is an abridgment of the Christian doctrine as laid down in the books of the prophets and apostles, and consists of six parts, viz. the Ten Commandments, the Creed, the Lord's Prayer, the words of Christ our Lord on Baptism, on the holy Supper of our Lord Jesus Christ, and on the calling and office of the keys. Now this Catechism, or abridgment of Christian doctrine, is not confined to us Protestants alone: the Roman Catholics have it also, and in common with us; and if they wish to instruct any one in Christian faith and practice, they impress upon him these very articles, and teach him, in precisely the same way, what he must believe and practise, if he would be a Christian and attain to salvation; as may be seen in the Roman Catechism, and in those of

Canisius, Volusius, and others, as well as in the recent reprint of the Hildesheim Catechism.

Whence it is that the authors of the Confession of Augsburg declare in their preface, that "all Roman Catholics and Protestants live and strive under one Christ;" and in the end of the twenty-first article, that "our (the Protestant) doctrine (as may be seen from the works of the Fathers) is not opposed to the common faith of the Christian Church, nay, even of the Roman Church." The *Apology for the Confession*, in the article on justification, says, that it should not readily be believed that the Roman Church holds every thing that the Pope, Cardinals, Bishops, or individual theologians and monks have held, maintained, and taught; "that the knowledge of Christ has, at all times, been preserved by some pious persons in the Roman Church that "we do not accuse all (Roman Catholics), for we hold that there have always been in the monasteries pious and upright individuals, who have kept aloof from the traditions of men, and refused to assent to the creed of the hypocrites who were among their number." Luther, too, confesses "that there is under the papacy much Christian goodness, yea, all Christian goodness." He has a similar admission also in the sixth volume; and in the seventh he declares that he "holds as dear brethren and members of the Christian Church, all those who confess with him (as do the Roman Catholics) that Christ was sent by the Father, that He has reconciled us to Him by His death, and has purchased salvation for us." And Philip Melancthon confesses, that "those who hold the fundamentals of faith have been, are, and will be, the Church of God, although some of them may have had more, and others, less, light."

II. Secondly, because under the papacy there has been a true Church; that is to say, a certain assembly of men who hear the word of God and use the sacraments established by Christ. For if there were not, or had not been, under the papacy, a true Church, it would follow that all who are, or at any

time have been attached to the Roman Catholic Church, must be hopelessly damned; a conclusion which none of our divines has ever advanced in speaking or in writing. Nay further, Luther argues, from the very fact that the true Church did subsist under the papacy, that the Pope is Antichrist — a position which is nevertheless highly questionable; — writing in his *Commentary on the Epistle to the Galatians*, that where the essentials of the word of God and the sacraments dwell, there is a holy Church, even though Antichrist should rule therein.

So also in the Epitome Examinis Philipp. Melancthonis, the question "Whether there was a true Church under the papacy?" is answered, "Yes, most assuredly. For it is notorious, that under the papal rule there still were preserved the word of God and the articles derived therefrom, — the doctrine of the Catechism: viz. the Ten Commandments, the Apostles' Creed, the Lord's Prayer, the doctrine of Baptism, the portions of the gospels and epistles for Sundays, from which the elect learned the fundamentals of Christian truth, and either despised human traditions, or were struck down in the contest with corruption and death."

The author of this *Epitome* is John Säubert, formerly chief preacher at Nürnberg, and highly esteemed by Duke Augustus, of glorious memory. It is compiled from the *De Locis Theologicis* of Hafen-Refler, the celebrated divine of Tübingen, a book of approved orthodoxy, and in common use throughout Sweden, both in the schools and the universities.

III. Thirdly, because the Roman Catholics, as well as we, believe and confess, both with the heart and with the lips, in their public writings and their teaching from the pulpit, that in no other is there salvation, no other name is there given to men, whereby they may be saved, but the name of Jesus; and that man is justified in God's sight, not by the works of the law, nor by the merit of works, but by the grace and mercy of God, and the satisfaction of our Lord and Saviour Jesus Christ, of whom the Catholic

Church (as the late pious and upright Abbot of Gytzburg writes in the preface of his *Compendium Regulae Fidei Catholicae)* teaches, and has always taught, that, from the beginning of the world, no one has been, or can be, saved, but through Jesus Christ, the only Mediator between God and men; and that no other name under heaven has been given to men whereby they can be saved. And on the feast of the Nativity of our Lord the entire Church sings —

> "This ever-blest recurring day
> Its witness bears, that all alone,
> From Thy own Father's bosom, forth,
> To save the world, Thou earnest down."

The Council of Trent calls Him "our only Redeemer and Saviour;" and, in another place, declares that God has appointed Him the "Propitiator, through faith in His Blood, for our sins; and not only for ours, but for those of the whole world" (Sess. vi. ch. 2, *On Justification).* And again, "if men born of Adam be not born again in Christ, they never can obtain justification; because this regeneration is gratuitously imparted to them through the merits of His Passion, whereby they are justified: for which benefit the Apostle directs us always to give thanks to God the Father, who has made us capable of the inheritance of the saints in light, and rescued us from the power of darkness, and established us in the kingdom of His beloved Son, in whom we have redemption and the forgiveness of sins."

The Christian Assembly of Trier, moreover, teaches that the "beginning of justification in adults flows by a purely gratuitous mercy from God in Christ that is "from his vocation, whereby they are called without consideration of any merit of their own; that "none of those things which precede justification, whether faith or works, merits the grace of justification;" and that "we must hold, as of faith, that sin neither is

forgiven, nor was ever forgiven, except through the gratuitous mercy of God and for Christ's sake."

Our own Doctors also, as Flavius, Hunnius, J. Gerhard, G. Calixtus, and many others, are compelled to admit that in the book entitled *Hortulus Animae*, and in the Rituals of Maintz, Trier, Cologne, and other Churches, the dying Christian is exhorted and sustained, not by the consideration of his own merits, nor of any other false means of salvation, but solely by trust in Christ, partly through prayers and instructions, partly through special questions addressed to this end. I shall give but a single example from the Ritual of Maintz, printed in 1599. In this ritual there is an instruction for the dying, and for those who have received Extreme Unction, in which, among other things, it is said, "Thy own merits, nay, even the merits of the whole human race, are insufficient to form a title to eternal happiness; and since our own works and our own merits are inadequate, we must throw ourselves upon the merits of Christ our common Saviour, whom God, out of His divine charity, has given to the world. On this gracious and merciful God must thou place thy reliance; be of good heart and fear not, but keep a firm hope and undoubting confidence." And, after the Unction has been received, "If thou wilt place thy trust in the good God, who is merciful and full of clemency, and in His grace, and wilt strive and fight bravely against all the assaults of sin and the devil, and wilt discard all temptation of doubt, the Almighty God will easily hide thy sins in the many and precious merits of Jesus Christ; in Him, thy Saviour, thou shalt be delivered from sin and damnation, and thy soul shall be securely established in happiness." And in the Hildesheim Catechism, the sick and dying man says in his prayer, "Even though I were to lead a better life for the future, yet if Thou, O Lord, hast ordained that I am to die now, I prefer rather to die now, in accordance with Thy holy will, and forego all the good works, than live longer." Among the questions, too, which are addressed to the dying man, are the following:

“Dost thou desire that our Lord should shew thee mercy, and not justice; and that, above all things, He should deal with thee, not according to thy merits, but according to His own infinite justice?” Answer: “Yes,” “Dost thou believe that for thee there is no hope of happiness, save through His holy, precious, and bitter death alone?” Answer: “Yes.”

Hence, having now shewn that the fundamentals of faith exist in the Roman Catholic Church, and that it is possible within its pale to maintain the true Faith, to lead a Christian life, and to die happily, we are enabled with propriety to reply in the affirmative to the main question, “Whether an Evangelical-Protestant princess, in consideration of intermarriage with a Catholic king, may with a safe conscience embrace the Catholic religion?” She may do so: especially when it is considered:

(1.) That she neither herself sought this alliance, nor caused it to be sought on her behalf, but that it has unquestionably been offered to her in the designs of God’s holy providence.

(2.) That the alliance may be beneficial and salutary, not alone to her native duchy, but also to the Protestant religion, and perhaps to the project of Church union so long and anxiously desired.

It must be stipulated, however, that she shall not be required to abjure her former religion, and that no wide range of controversies or disputes shall be proposed to her as articles of faith; but that she shall be instructed with all possible brevity and simplicity, and most especially in those principles which are of indispensable necessity and connected with salvation — viz. renunciation of self, daily repentance, humility towards God, condescension and tenderness for the poor, imitation of the example of Christ, and the love of God and of her neighbour. Regarding which the pious J. Streder, in the first book of his True Christianity, writes with great discernment “That purity of doctrine, and the light of the knowledge of God, never dwells with those who live in the devil, in darkness, pride, avarice, and sensuality.”

"For how," he asks, "could pure and divine faith subsist where the manner of life is so impure and ungodly? Purity of doctrine and impurity of life never can be associated together, and have no community with each other; and, if we would maintain purity of faith, we must change our habits, abandon the unchristian life, follow the Lord Christ, and awake from sin. So will Christ enlighten us with the light of true faith. Wherefore, he who walketh not in Christ's footsteps, in His love, in humility, meekness, patience, and the fear of God, must necessarily be led astray. If we but lived in Christ, if we walked in charity and humility, and directed all our diligence and all our theological lore to the learning how we shall mortify the flesh and live in Christ, how Adam shall die and Christ live in us, how we shall subdue ourselves and the demon of the flesh, and overcome the world, there would no longer be so many angry controversies regarding faith, and all heresies would fall to the ground of their own accord."

And this doctrine certainly accords with that of Thomas à Kempis, of Taulerus, of Rusprock, of the author of the *German Theology*, and other pious and divinely enlightened men among the Roman Catholics.

However, against the answer which we have given, various objections may be proposed and urged. For example, the following:

FIRST OBJECTION.

"The Roman Catholic doctrine contains errors subversive of the foundations of faith."

ANSWER.

Yes, in the minds of those who believe them to be such, and subscribe to them against the dictates of conscience. But we hold with Hust, that every error is not heretical.

SECOND OBJECTION.

"They receive human traditions, and require the people to admit them."

ANSWER.

They teach that divine apostolic traditions, that is to say, doctrines which are not contained in Scripture, but which Christ propounded to the Apostles, are to be received with the same respect as the written word of God. And we ourselves admit the same; so that there only remains the question, whether this or that particular doctrine is a divine or apostolic tradition. But on the subject of human traditions, they teach nothing but what we ourselves hold.

THIRD OBJECTION.

"They require the invocation of the Saints, whereas God alone is to be invoked."

ANSWER.

In the Council of Trent there is not a word which implies obligation; but simply a declaration that "it is good and useful." And hence no individual Roman Catholic is bound to invoke the saints, unless he attends a procession, or takes a part in the public church in the litany of the Saints. And these invocations do not imply any thing more than a prayer for their intercession on our behalf — a practice received by both the Greek and the Latin Churches for fourteen hundred years, without being thought to trench upon the honour due to God.

FOURTH OBJECTION.

“They enjoin a belief in purgatory, which is entirely without warrant in the word of God.”

ANSWER.

In so far as purgatory signifies a purgation of departed souls from the sins which still cling to them, many of the ancient doctors of the Church have held that doctrine.

FIFTH OBJECTION.

“The celebration of the Mass, from the multiplication of strange ceremonies, has become ridiculous and offensive.”

ANSWER.

To those who do not understand the signification of those rites and ceremonies; but there is not one of them which has not a good signification. On this subject, the Hildesheim Catechism, as well as many other works, may be consulted. Besides, the Mass, according to their view, is a commemoration of the bitter Passion and Death of Jesus Christ.

SIXTH OBJECTION.

“They deprive the laity of the consecrated chalice.”

ANSWER.

Just as man’s unbelief does not destroy the faith and promise of God, so neither can the withdrawal of the consecrated chalice from the laity, in which they have themselves no share, be imputed to them; on the contrary, we must hold that if they approach the Holy Supper with penitent and

believing hearts, they receive the Body and Blood of Christ no less than ourselves.

SEVENTH OBJECTION.

"It is required that one should believe in seven Sacraments, whereas there are but two."

ANSWER.

According to the acceptation of the word "Sacrament" (which it should be remembered is not found in Holy Scripture), there are numbered in the *Apology of the Confession of Augsburg*, in one place two, and in another three; that is, if absolution be reckoned in the number. And, at all events, the Roman Catholics themselves allow that Baptism and the Lord's Supper are the two most excellent and principal.

Should any other objections be proposed, we are prepared, with all due respect, to reply to them either verbally or in writing, as well as to supply any such further explanations of the above, as may chance to be desired. Nevertheless, it must be confessed, that the discussion of the controversies between us and Roman Catholics is but ill adapted for a princess, whose duty it is to adhere to the simple principles of faith, which are also the best; and that it belongs rather to theologians, among whom there have been found several on both sides, whose eyes God, in His saving grace, has opened to see that the difference between the two religions is not so great as it is commonly represented. And it is well worthy of observation that the upright and learned Philip Melancthon, in his *Judicium de Moderandis Controversiis*, addressed to King Francis in the sixth year after publication of the Confession of Augsburg, admits that it is so. "Finally," says he, "the adjustment of all controversies between the Papists and us is easy; and I

hope that all pious and God-fearing hearts may be able to agree in them all."

Pray God that it be so; and that the present work tend to the glory of His Name, and to the temporal and eternal welfare of both the high personages and their royal and princely houses, for the sake of Christ our common Saviour. Amen.

III

[AS THE ORIGINAL of these very important documents has never been published in England, I think it right to subjoin the extracts from them which Dr. Guhrauer has inserted in the Appendix of his edition of Leibnitz's German Works. There are two distinct drafts. The first is very short.]

Ce que V. A. S. répliqué dans sa lettre à ce que j'avais écrit touchant la Transsubstantiation, me fait connoître combien il est difficile de satisfaire même les personnes les plus équitables et les plus éclaircies, quand on n'entre pas tout à fait à point nommé dans leurs sentimens et pensées. Souvent de très bonnes pensées out été empêchées, parceque des personnes bien intentionnées, et qui avaient un même but, se sentirent contraires en ce qu'ils n'étaient pas d'accord sur les moyens dont il se fallait servir, quoique ces moyens en effet fussent bons et compatibles entre eux. La même chose arrive ici touchant le point de la paix de l'Eglise. V. A. S. s'étant appliquée à l'établir sur l'antiquité et sur la méthode compendieuse de l'autorité d'une église visible, ne semble point approuver qu'on entre dans le détail des controverses, et me reproche que je m'éloigne par-la des vrais principes. Pour moi, je peux dire d'avoir étudié l'antiquité, et d'estimer infiniment une tradition de l'Eglise Catholique. J'ai cru néanmoins qu'il serait important, non pas en effet pour tout le monde, mais pour ceux qui y semblent propres, d'y joindre une discussion exacte des matières, *pour n'avoir rien à se reprocher*, *et pour agir avec toute la sincérité et toute l'exactitude possibles*, *sans déguisement et sans dissimulation*.

[The second enters more into the motives of the writer. It contains a distinct allusion to the contemplated work.]

J’ai eu l’honneur de connoître particulièrement ce Monsieur Arnaud quand j’étais à Paris; il avait aussi la bonté de faire quelque estime de moi, et quand je partis de Paris pour me rendre à Hanovre, il me donna une lettre pour un Capucin d’ici, qui lui avait demandé quelque chose touchant la créance des Grecs en matière de Transsubstantiation, où il avait mis à mon louange des expressions qui m’auraient empêché de porter ces lettres, si je les avais lues; mais je ne l’appris qu’à Hanovre que Monsieur Arnaud avait écrit qu’il ne me manquait que la vraie religion pour être véritablement un des grands hommes de ce siècle. Mais comme je n’ai jamais affecté une grande réputation, et que j’ai plutôt tâché de couvrir mon nom quand j’ai publié quelque chose (comme lorsque le livre de Caesarinus Furstenerius fut imprimé par ordre du feu Prince), il n’a aussi jamais tenu à moi d’être du côté de la vérité. Et ce qui m’avait le plus détourné des sentimens de l’Eglise Romaine, c’était (car à présent je ne parle pas de la pratique) principalement les difficultés qui se trouvaient dans la Transsubstantiation, et les démonstrations que je crois d’avoir sur les matières approchantes de la grâce, j’ai toujours tâché de me satisfaire, et peu s’en faut, que je n’aie pas réussi entièrement. Mais ces matières demandant des méditations exactes sur la partie la plus profonde des métaphysiques, la facilité, qu’il y a de se tromper là dessus, avant que d’avoir rangé ses raisonnements d’une manière rigoureuse à la façon d’un calcul, m’en empêche de former un jugement définitif. Monsieur Arnaud, qui entend parfaitement la philosophie moderne, et qui parait Cartésien, n’a jamais osé toucher cette corde, ou répondre aux difficultés presqu’invincibles qui semblent combattre la Transsubstantiation; peut-être parce-qu’il croyait que son explication serait condamnée quand elle paroîtrait. De sorte que voici comme je crois qu’il faudrait faire pour aller sûrement en ces matières: savoir, il faudrait qu’un homme méditatif qui n est *pas éloigné de la réunion*, *composât une Exposition de la Foi*, *un peu plus particularisée que*

celle de Monsieur de Condom, où il tâcherait de s'expliquer, *le plus exactement et le plus sincèrement possibles*, *sur les articles disputés*, évitant les équivoques et les termes de la chicane scolastique, et ne parlant que par des expressions naturelles. Et il soumettrait cette explication au jugement de quelques savans évêques des plus modérés (du parti de l'Eglise Romaine), dissimulant et son nom et son parti. Et pour les faire juger d'autant plus favorablement, il ne demanderait point s'ils sont de son sentiment, mais seulement s'ils tiennent son sentiment pour tolérable dans leur Eglise.

V. A. S. me dira qu'il ne faut pas tant de façons, et on peut être de la communion de Rome sans entrer dans ce détail. Je réponds distinguendo: une personne qui n'a pas approfondi ces matières, et n'a pas dessein de les approfondir, est aisée à satisfaire. *Mais celui qui a médité sur les choses doit aller sincere-merit, et s'il soupçonne que certains de ses sentimens pourraient être condamnés*, *il se doit expliquer de bonne heure*. Autrement il se pourrait exposer à des conjonctures fâcheuses, si quelque jour *on le voulait faire avouer des choses qu'il ne saurait approuver*. Ce qu'il arriva à Galileo, qu'on força à abjurer le mouvement de la terre.

Personne ne pourrait en ce cas faire obtenir sous mains une approbation de cette nature que V. A. S. Et pour mieux dresser une telle exposition, il faudrait la concilier avec V. A. même. Mais sois que cela réussisse ou non, celui qui fait le sien pour n'être point dans le schisme, est en effet dans l'Eglise, au moins in foro interno, suivant l'expression de V. A. S. que je trouve excellente. Je crois cependant que l'approbation des évêques suffirait, et que celle de Rome ne serait point si nécessaire. Peut-être pourtant qu'on le pourrait espérer, si on s'y prenait comme il faut, et je sais qu'il y a des personnes à Rome qui y pourraient servir. Mais on ne saurait bien espérer quelque chose de cette nature sans une grande application.

Je ne sais si V. A. S. a vû M. l'Evêque de Tina, autrement ce Père Royan, qui a été dans nos cours il n'y a pas long-temps, pour proposer des voies

d’accommodement en matière de religion, et ce qu’elle en juge.

Il me semble que V. A. S. n’a pas pris mon sens touchant ce que j’avais écrit à l’égard d’une exposition raisonnable des matières de foi, qui fisse voir qu’il n’y a pas de contradiction. Cela ne déroge point à l’autorité d’une tradition perpétuelle de l’Eglise Romaine. Car ceux qui tiennent que quelque dogme de l’Eglise Romaine implique contradiction, tiendront aussi que l’Eglise ne les a pas enseignés, et se croiront en droit de donner aux passages de la Sainte Ecriture et de SS. Pères une explication, qui selon eux évité l’absurdité, outre que les Pères parlent souvent assez obscurément et assez variablement sur les articles qui n’étaient pas agités de leur temps, par exemple St. Augustin.

Discourse on Metaphysics (1686)

Original Title: 'Discours de métaphysique'

Translated by George Redington Montgomery, 1908

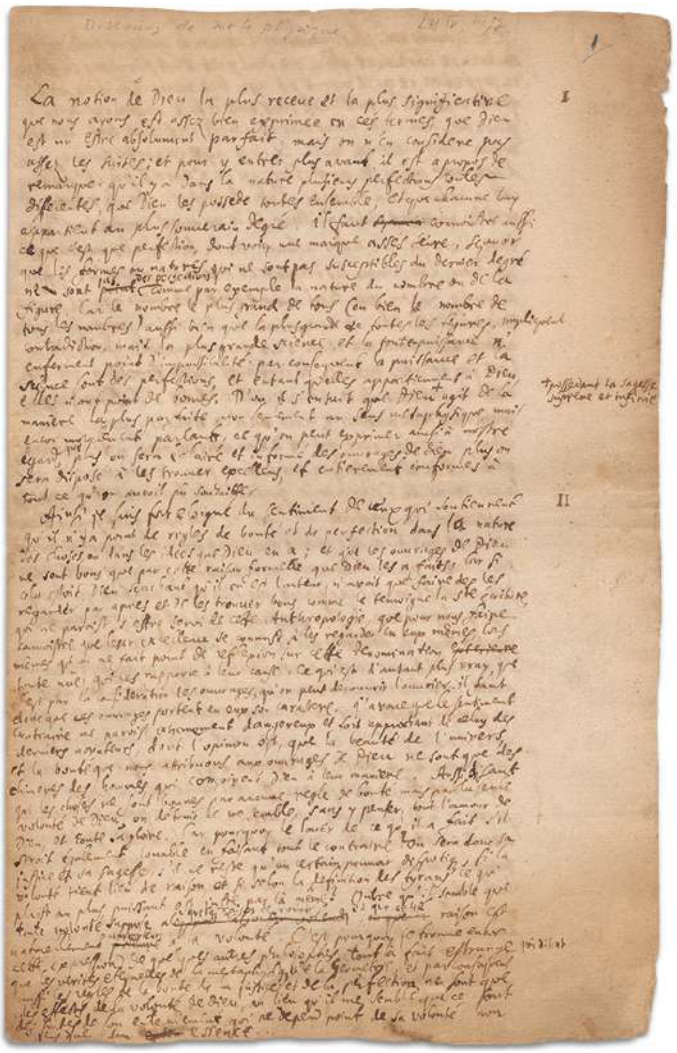
This short treatise develops a philosophy concerning physical substance, motion and resistance of bodies, while examining God's role within the universe. It is one of the few texts presenting in a consistent form the earlier philosophy of Leibniz. The treatise is closely connected to the epistolary discussion that Leibniz conducted with Antoine Arnauld. However, he refrained from releasing the full text and it remained unpublished until the mid-nineteenth century. Arnauld received only an abridged version in 37 points which resumed whole paragraphs and steered their discussion.

In the text, Leibniz explains that metaphysical considerations proceed from God to the substantial world and back to the spiritual realm. The starting point for the work is the conception of God as an absolutely perfect being (I), that God is good but goodness exists independently of God (a rejection of divine command theory) (II), and that God has created the world in an ordered and perfect fashion (III–VII).

Discourse on Metaphysics proposes the controversial claim, "That the opinions of... scholastic philosophers are not to be wholly despised (XI)." In the early days of modern philosophy in the seventeenth century, philosophers were expected to reject many of the precepts of medieval philosophy. Leibniz saw the failures of scholasticism merely as one of rigor. He argued that if some careful and meditative thinker was to take the trouble to clarify and direct their thoughts in the manner of analytic

geometers, he would derive a great treasure of important truths, wholly demonstrable.

Leibniz also claims that God's omnipotence is in no way impugned by the thought of evil, but was rather solidified. He endorses the view that God chooses the best of all possible worlds. Thus, Leibniz suggests that this world is the best there possibly could be — taking all facts into account, no better world could be imagined, even if we believed that we could think of something more perfect. Leibniz' groundbreaking conception of physical substance would be later expanded on in *Monadology*.



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I. Concerning the divine perfection and that God does everything in the most desirable way.

THE CONCEPTION OF God which is the most common and the most full of meaning is expressed well enough in the words: God is an absolutely perfect being. The implications, however, of these words fail to receive sufficient consideration. For instance, there are many different kinds of perfection, all of which God possesses, and each one of them pertains to him in the highest degree.

We must also know what perfection is. One thing which can surely be affirmed about it is that those forms or natures which are not susceptible of it to the highest degree, say the nature of numbers or of figures, do not permit of perfection. This is because the number which is the greatest of all (that is, the sum of all the numbers), and likewise the greatest of all figures, imply contradictions. The greatest knowledge, however, and omnipotence contain no impossibility. Consequently power and knowledge do admit of perfection, and in so far as they pertain to God they have no limits.

Whence it follows that God who possesses supreme and infinite wisdom acts in the most perfect manner not only metaphysically, but also from the moral standpoint. And with respect to ourselves it can be said that the more we are enlightened and informed in regard to the works of God the more will we be disposed to find them excellent and conforming entirely to that which we might desire.

II. Against those who hold that there is in the works of God no goodness, or that the principles of goodness and beauty are arbitrary.

THEREFORE I AM far removed from the opinion of those who maintain that there are no principles of goodness or perfection in the nature of things, or in the ideas which God has about them, and who say that the works of God are good only through the formal reason that God has made them. If this position were true, God, knowing that he is the author of things, would not have to regard them afterwards and find them good, as the Holy Scripture witnesses. Such anthropological expressions are used only to let us know that excellence is recognized in regarding the works themselves, even if we do not consider their evident dependence on their author. This is confirmed by the fact that it is in reflecting upon the works that we are able to discover the one who wrought. They must therefore bear in themselves his character. I confess that the contrary opinion seems to me extremely dangerous and closely approaches that of recent innovators who hold that the beauty of the universe and the goodness which we attribute to the works of God are chimeras of human beings who think of God in human terms. In saying, therefore, that things are not good according to any standard of goodness, but simply by the will of God, it seems to me that one destroys, without realizing it, all the love of God and all his glory; for why praise him for what he has done, if he would be equally praiseworthy in doing the contrary? Where will be his justice and his wisdom if he has only a certain despotic power, if arbitrary will takes the place of reasonableness, and if in accord with the definition of tyrants, justice consists in that which is pleasing to the most powerful? Besides it seems that every act of willing

supposes some reason for the willing and this reason, of course, must precede the act. This is why, accordingly, I find so strange those expressions of certain philosophers who say that the eternal truths of metaphysics and Geometry, and consequently the principles of goodness, of justice, and of perfection, are effects only of the will of God. To me it seems that all these follow from his understanding, which does not depend upon his will any more than does his essence.

III. Against those who think that God might have made things better than he has.

NO MORE AM I able to approve of the opinion of certain modern writers who boldly maintain that that which God has made is not perfect in the highest degree, and that he might have done better. It seems to me that the consequences of such an opinion are wholly inconsistent with the glory of God. *Uti minus malum habet rationem boni, ita minus bonum habet rationem mali*. I think that one acts imperfectly if he acts with less perfection than he is capable of. To show that an architect could have done better is to find fault with his work. Furthermore this opinion is contrary to the Holy Scriptures when they assure us of the goodness of God's work. For if comparative perfection were sufficient, then in whatever way God had accomplished his work, since there is an infinitude of possible imperfections, it would always have been good in comparison with the less perfect; but a thing is little praiseworthy when it can be praised only in this way.

I believe that a great many passages from the divine writings and from the holy fathers will be found favoring my position, while hardly any will be found in favor of that of these modern thinkers. Their opinion is, in my judgment, unknown to the writers of antiquity and is a deduction based upon the too slight acquaintaince which we have with the general harmony of the universe and with the hidden reasons for God's conduct. In our ignorance, therefore, we are tempted to decide audaciously that many things might have been done better.

These modern thinkers insist upon certain hardly tenable subtleties, for they imagine that nothing is so perfect that there might not have been

something more perfect. This is an error. They think, indeed, that they are thus safeguarding the liberty of God. As if it were not the highest liberty to act in perfection according to the sovereign reason. For to think that God acts in anything without having any reason for his willing, even if we overlook the fact that such action seems impossible, is an opinion which conforms little to God's glory. For example, let us suppose that God chooses between A and B, and that he takes A without any reason for preferring it to B. I say that this action on the part of God is at least not praiseworthy, for all praise ought to be founded upon reason which *ex hypothesi* is not present here. My opinion is that God does nothing for which he does not deserve to be glorified.

IV. That love for God demands on our part complete satisfaction with and acquiescence in that which he has done.

THE GENERAL KNOWLEDGE of this great truth that God acts always in the most perfect and most desirable manner possible, is in my opinion the basis of the love which we owe to God in all things; for he who loves seeks his satisfaction in the felicity or perfection of the object loved and in the perfection of his actions. *Idem velle et idem nolle vera amicitia est*. I believe that it is difficult to love God truly when one, having the power to change his disposition, is not disposed to wish for that which God desires. In fact those who are not satisfied with what God does seem to me like dissatisfied subjects whose attitude is not very different from that of rebels. I hold therefore, that on these principles, to act conformably to the love of God it is not sufficient to force oneself to be patient, we must be really satisfied with all that comes to us according to his will. I mean this acquiescence in regard to the past; for as regards the future one should not be a quietist with the arms folded, open to ridicule, awaiting that which God will do; according to the sophism which the ancients called λόγον άεργον, the lazy reason. It is necessary to act conformably to the presumptive will of God as far as we are able to judge of it, trying with all our might to contribute to the general welfare and particularly to the ornamentation and the perfection of that which touches us, or of that which is nigh and so to speak at our hand. For if the future shall perhaps show that God has not wished our good intention to have its way, it does not follow that he has not wished us to act as we have; on the contrary, since he is the best of all masters, he ever demands only the right intentions, and it is for him to know the hour and the proper place to let good designs succeed.

V. In what the principles of the divine perfection consist, and that the simplicity of the means counterbalances the richness of the effects.

IT IS SUFFICIENT therefore to have this confidence in God, that he has done everything for the best and that nothing will be able to injure those who love him. To know in particular, however, the reasons which have moved him to choose this order of the universe, to permit sin, to dispense his salutary grace in a certain manner, — this passes the capacity of a finite mind, above all when such a mind has not come into the joy of the vision of God. Yet it is possible to make some general remarks touching the course of providence in the government of things. One is able to say, therefore, that he who acts perfectly is like an excellent Geometer who knows how to find the best construction for a problem; like a good architect who utilizes his location and the funds destined for the building in the most advantageous manner, leaving nothing which shocks or which does not display that beauty of which it is capable; like a good householder who employs his property in such a way that there shall be nothing uncultivated or sterile; like a clever machinist who makes his production in the least difficult way possible; and like an intelligent author who encloses the most of reality in the least possible compass.

Of all beings those which are the most perfect and occupy the least possible space, that is to say those which interfere with one another the least, are the spirits whose perfections are the virtues. That is why we may not doubt that the felicity of the spirits is the principal aim of God and that he puts this purpose into execution, as far as the general harmony will permit. We will recur to this subject again.

When the simplicity of God's way is spoken of, reference is specially made to the means which he employs, and on the other hand when the variety, richness and abundance are referred to, the ends or effects are had in mind. Thus one ought to be proportioned to the other, just as the cost of a building should balance the beauty and grandeur which is expected. It is true that nothing costs God anything, just as there is no cost for a philosopher who makes hypotheses in constructing his imaginary world, because God has only to make decrees in order that a real world come into being; but in matters of wisdom the decrees or hypotheses meet the expenditure in proportion as they are more independent of one another. The reason wishes to avoid multiplicity in hypotheses or principles very much as the simplest system is preferred in Astronomy.

VI. That God does nothing which is not orderly, and that it is not even possible to conceive of events which are not regular.

THE ACTIVITIES OR the acts of will of God are commonly divided into ordinary and extraordinary. But it is well to bear in mind that God does nothing out of order. Therefore, that which passes for extraordinary is so only with regard to a particular order established among the created things, for as regards the universal order, everything conforms to it. This is so true that not only does nothing occur in this world which is absolutely irregular, but it is even impossible to conceive of such an occurrence. Because, let us suppose for example that some one jots down a quantity of points upon a sheet of paper helter skelter, as do those who exercise the ridiculous art of Geomancy; now I say that it is possible to find a geometrical line whose concept shall be uniform and constant, that is, in accordance with a certain formula, and which line at the same time shall pass through all of those points, and in the same order in which the hand jotted them down; also if a continuous line be traced, which is now straight, now circular, and now of any other description, it is possible to find a mental equivalent, a formula or an equation common to all the points of this line by virtue of which formula the changes in the direction of the line must occur. There is no instance of a face whose contour does not form part of a geometric line and which can not be traced entire by a certain mathematical motion. But when the formula is very complex, that which conforms to it passes for irregular. Thus we may say that in whatever manner God might have created the world, it would always have been regular and in a certain order. God, however, has chosen the most perfect, that is to say the one which is at the same time the simplest in hypotheses and the richest in phenomena, as

might be the case with a geometric line, whose construction was easy, but whose properties and effects were extremely remarkable and of great significance. I use these comparisons to picture a certain imperfect resemblance to the divine wisdom, and to point out that which may at least raise our minds to conceive in some sort what cannot otherwise be expressed. I do not pretend at all to explain thus the great mystery upon which depends the whole universe.

VII. That miracles conform to the regular order although they go against the subordinate regulations; concerning that which God desires or permits and concerning general and particular intentions.

NOW SINCE NOTHING is done which is not orderly, we may say that miracles are quite within the order of natural operations. We use the term natural of these operations because they conform to certain subordinate regulations which we call the nature of things. For it can be said that this nature is only a custom of God's which he can change on the occasion of a stronger reason than that which moved him to use these regulations. As regards general and particular intentions, according to the way in which we understand the matter, it may be said on the one hand that everything is in accordance with his most general intention, or that which best conforms to the most perfect order he has chosen; on the other hand, however, it is also possible to say that he has particular intentions which are exceptions to the subordinate regulations above mentioned. Of God's laws, however, the most universal, i.e. that which rules the whole course of the universe, is without exceptions.

It is possible to say that God desires everything which is an object of his particular intention. When we consider the objects of his general intentions, however, such as are the modes of activities of created things and especially of the reasoning creatures with whom God wishes to co-operate, we must make a distinction; for if the action is good in itself, we may say that God wishes it and at times commands it, even though it does not take place; but if it is bad in itself and becomes good only by accident through the course of events and especially after chastisement and satisfaction have corrected

its malignity and rewarded the ill with interest in such a way that more perfection results in the whole train of circumstances than would have come if that ill had not occurred, — if all this takes place we must say that God permits the evil, and not that he desired it, although he has co-operated by means of the laws of nature which he has established. He knows how to produce the greatest good from them.

VIII. In order to distinguish between the activities of God and the activities of created things we must explain the conception of an individual substance.

IT IS QUITE difficult to distinguish God's actions from those of his creatures. Some think that God does everything; others imagine that he only conserves the force that he has given to created things. How far can we say either of these opinions is right?

In the first place since activity and passivity pertain properly to individual substances (*actiones sunt suppositorum*) it will be necessary to explain what such a substance is. It is indeed true that when several predicates are attributes of a single subject and this subject is not an attribute of another, we speak of it as an individual substance, but this is not enough, and such an explanation is merely nominal. We must therefore inquire what it is to be an attribute in reality of a certain subject. Now it is evident that every true predication has some basis in the nature of things, and even when a proposition is not identical, that is, when the predicate is not expressly contained in the subject, it is still necessary that it be virtually contained in it, and this is what the philosophers call *in-esse*, saying thereby that the predicate is in the subject. Thus the content of the subject must always include that of the predicate in such a way that if one understands perfectly the concept of the subject, he will know that the predicate appertains to it also. This being so, we are able to say that this is the nature of an individual substance or of a complete being, namely, to afford a conception so complete that the concept shall be sufficient for the understanding of it and for the deduction of all the predicates of which the substance is or may become the subject. Thus the quality of king, which

belonged to Alexander the Great, an abstraction from the subject, is not sufficiently determined to constitute an individual, and does not contain the other qualities of the same subject, nor everything which the idea of this prince includes. God, however, seeing the individual concept, or hæcceity, of Alexander, sees there at the same time the basis and the reason of all the predicates which can be truly uttered regarding him; for instance that he will conquer Darius and Porus, even to the point of knowing *a priori* (and not by experience) whether he died a natural death or by poison, — facts which we can learn only through history. When we carefully consider the connection of things we see also the possibility of saying that there was always in the soul of Alexander marks of all that had happened to him and evidences of all that would happen to him and traces even of everything which occurs in the universe, although God alone could recognize them all.

IX. That every individual substance expresses the whole universe in its own manner and that in its full concept is included all its experiences together with all the attendent circumstances and the whole sequence of exterior events.

THERE FOLLOW FROM these considerations several noticeable paradoxes; among others that it is not true that two substances may be exactly alike and differ only numerically, *solo numero*, and that what St. Thomas says on this point regarding angels and intelligences (*quod ibi omne individuum sit species infima*) is true of all substances, provided that the specific difference is understood as Geometers understand it in the case of figures; again that a substance will be able to commence only through creation and perish only through annihilation; that a substance cannot be divided into two nor can one be made out of two, and that thus the number of substances neither augments nor diminishes through natural means, although they are frequently transformed. Furthermore every substance is like an entire world and like a mirror of God, or indeed of the whole world which it portrays, each one in its own fashion; almost as the same city is variously represented according to the various situations of him who is regarding it. Thus the universe is multiplied in some sort as many times as there are substances, and the glory of God is multiplied in the same way by as many wholly different representations of his works. It can indeed be said that every substance bears in some sort the character of God's infinite wisdom and omnipotence, and imitates him as much as it is able to; for it expresses, although confusedly, all that happens in the universe, past, present and future, deriving thus a certain resemblance to an infinite perception or power of knowing. And since all other substances express this particular

substance and accommodate themselves to it, we can say that it exerts its power upon all the others in imitation of the omnipotence of the creator.

X. That the belief in substantial forms has a certain basis in fact, but that these forms effect no changes in the phenomena and must not be employed for the explanation of particular events.

IT SEEMS THAT the ancients, able men, who were accustomed to profound meditations and taught theology and philosophy for several centuries and some of whom recommend themselves to us on account of their piety, had some knowledge of that which we have just said and this is why they introduced and maintained the substantial forms so much decried to-day. But they were not so far from the truth nor so open to ridicule as the common run of our new philosophers imagine. I grant that the consideration of these forms is of no service in the details of physics and ought not to be employed in the explanation of particular phenomena. In regard to this last point, the schoolmen were at fault, as were also the physicians of times past who followed their example, thinking they had given the reason for the properties of a body in mentioning the forms and qualities without going to the trouble of examining the manner of operation; as if one should be content to say that a clock had a certain amount of clockness derived from its form, and should not inquire in what that clockness consisted. This is indeed enough for the man who buys it, provided he surrenders the care of it to someone else. The fact, however, that there was this misunderstanding and misuse of the substantial forms should not bring us to throw away something whose recognition is so necessary in metaphysics. Since without these we will not be able, I hold, to know the ultimate principles nor to lift our minds to the knowledge of the incorporeal natures and of the marvels of God. Yet as the geometer does not need to encumber his mind with the

famous puzzle of the composition of the continuum, and as no moralist, and still less a jurist or a statesman has need to trouble himself with the great difficulties which arise in conciliating free will with the providential activity of God, (since the geometer is able to make all his demonstrations and the statesman can complete all his deliberations without entering into these discussions which are so necessary and important in Philosophy and Theology), so in the same way the physicist can explain his experiments, now using simpler experiments already made, now employing geometrical and mechanical demonstrations without any need of the general considerations which belong to another sphere, and if he employs the co-operation of God, or perhaps of some soul or animating force, or something else of a similar nature, he goes out of his path quite as much as that man who, when facing an important practical question would wish to enter into profound argumentations regarding the nature of destiny and of our liberty; a fault which men quite frequently commit without realizing it when they cumber their minds with considerations regarding fate, and thus they are even sometimes turned from a good resolution or from some necessary provision.

XI. That the opinions of the theologians and of the so-called scholastic philosophers are not to be wholly despised.

I KNOW THAT I am advancing a great paradox in pretending to resuscitate in some sort the ancient philosophy, and to recall *postliminio* the substantial forms almost banished from our modern thought. But perhaps I will not be condemned lightly when it is known that I have long meditated over the modern philosophy and that I have devoted much time to experiments in physics and to the demonstrations of geometry and that I, too, for a long time was persuaded of the baselessness of those "beings" which, however, I was finally obliged to take up again in spite of myself and as though by force. The many investigations which I carried on compelled me to recognize that our moderns do not do sufficient justice to Saint Thomas and to the other great men of that period and that there is in the theories of the scholastic philosophers and theologians far more solidity than is imagined, provided that these theories are employed *à propos* and in their place. I am persuaded that if some careful and meditative mind were to take the trouble to clarify and direct their thoughts in the manner of analytic geometers, he would find a great treasure of very important truths, wholly demonstrable.

XII. That the conception of the extension of a body is in a way imaginary and does not constitute the substance of the body.

BUT TO RESUME the thread of our discussion, I believe that he who will meditate upon the nature of substance, as I have explained it above, will find that the whole nature of bodies is not exhausted in their extension, that is to say, in their size, figure and motion, but that we must recognize something which corresponds to soul, something which is commonly called substantial form, although these forms effect no change in the phenomena, any more than do the souls of beasts, that is if they have souls. It is even possible to demonstrate that the ideas of size, figure and motion are not so distinctive as is imagined, and that they stand for something imaginary relative to our preceptions as do, although to a greater extent, the ideas of color, heat, and the other similar qualities in regard to which we may doubt whether they are actually to be found in the nature of the things outside of us. This is why these latter qualities are unable to constitute "substance" and if there is no other principle of identity in bodies than that which has just been referred to a body would not subsist more than for a moment.

The souls and the substance-forms of other bodies are entirely different from intelligent souls which alone know their actions, and not only do not perish through natural means but indeed always retain the knowledge of what they are; a fact which makes them alone open to chastisement or recompense, and makes them citizens of the republic of the universe whose monarch is God. Hence it follows that all the other creatures should serve them, a point which we shall discuss more amply later.

XIII. As the individual concept of each person includes once for all everything which can ever happen to him, in it can be seen, a priori the evidences or the reasons for the reality of each event, and why one happened sooner than the other. But these events, however certain, are nevertheless contingent, being based on the free choice of God and of his creatures. It is true that their choices always have their reasons, but they incline to the choices under no compulsion of necessity.

BUT BEFORE GOING further it is necessary to meet a difficulty which may arise regarding the principles which we have set forth in the preceding. We have said that the concept of an individual substance includes once for all everything which can ever happen to it and that in considering this concept one will be able to see everything which can truly be said concerning the individual, just as we are able to see in the nature of a circle all the properties which can be derived from it. But does it not seem that in this way the difference between contingent and necessary truths will be destroyed, that there will be no place for human liberty, and that an absolute fatality will rule as well over all our actions as over all the rest of the events of the world? To this I reply that a distinction must be made between that which is certain and that which is necessary. Every one grants that future contingencies are assured since God foresees them, but we do not say just because of that that they are necessary. But it will be objected, that if any conclusion can be deduced infallibly from some definition or concept, it is necessary; and now since we have maintained that everything which is to happen to anyone is already virtually included in his nature or concept, as all the properties are contained in the definition of a circle, therefore, the difficulty still remains. In order to meet the objection completely, I say that

the connection or sequence is of two kinds; the one, absolutely necessary, whose contrary implies contradiction, occurs in the eternal verities like the truths of geometry; the other is necessary only *ex hypothesi*, and so to speak by accident, and in itself it is contingent since the contrary is not implied. This latter sequence is not founded upon ideas wholly pure and upon the pure understanding of God, but upon his free decrees and upon the processes of the universe. Let us give an example. Since Julius Caesar will become perpetual Dictator and master of the Republic and will overthrow the liberty of Rome, this action is contained in his concept, for we have supposed that it is the nature of such a perfect concept of a subject to involve everything, in fact so that the predicate may be included in the subject *ut possit inesse subjecto*. We may say that it is not in virtue of this concept or idea that he is obliged to perform this action, since it pertains to him only because God knows everything. But it will be insisted in reply that his nature or form responds to this concept, and since God imposes upon him this personality, he is compelled henceforth to live up to it. I could reply by instancing the similar case of the future contingencies which as yet have no reality save in the understanding and will of God, and which, because God has given them in advance this form, must needs correspond to it. But I prefer to overcome a difficulty rather than to excuse it by instancing other difficulties, and what I am about to say will serve to clear up the one as well as the other. It is here that must be applied the distinction in the kind of relation, and I say that that which happens conformably to these decrees is assured, but that it is not therefore necessary, and if anyone did the contrary, he would do nothing impossible in itself, although it is impossible *ex hypothesi* that that other happen. For if anyone were capable of carrying out a complete demonstration by virtue of which he could prove this connection of the subject, which is Caesar, with the predicate, which is his successful enterprise, he would bring us to see in fact that the future

dictatorship of Caesar had its basis in his concept or nature, so that one would see there a reason why he resolved to cross the Rubicon rather than to stop, and why he gained instead of losing the day at Pharsalus, and that it was reasonable and by consequence assured that this would occur, but one would not prove that it was necessary in itself, nor that the contrary implied a contradiction, almost in the same way in which it is reasonable and assured that God will always do what is best although that which is less perfect is not thereby implied. For it would be found that this demonstration of this predicate as belonging to Caesar is not as absolute as are those of numbers or of geometry, but that this predicate supposes a sequence of things which God has shown by his free will. This sequence is based on the first free decree of God which was to do always that which is the most perfect and upon the decree which God made following the first one, regarding human nature, which is that men should always do, although freely, that which appears to be the best. Now every truth which is founded upon this kind of decree is contingent, although certain, for the decrees of God do not change the possibilities of things and, as I have already said, although God assuredly chooses the best, this does not prevent that which is less perfect from being possible in itself. Although it will never happen, it is not its impossibility but its imperfection which causes him to reject it. Now nothing is necessitated whose opposite is possible. One will then be in a position to satisfy these kinds of difficulties, however great they may appear (and in fact they have not been less vexing to all other thinkers who have ever treated this matter), provided that he considers well that all contingent propositions have reasons why they are thus, rather than otherwise, or indeed (what is the same thing) that they have proof *a priori* of their truth, which render them certain and show that the connection of the subject and predicate in these propositions has its basis in the nature of the one and of the other, but he must further remember that such contingent propositions

have not the demonstrations of necessity, since their reasons are founded only on the principle of contingency or of the existence of things, that is to say, upon that which is, or which appears to be the best among several things equally possible. Necessary truths, on the other hand, are founded upon the principle of contradiction, and upon the possibility or impossibility of the essences themselves, without regard here to the free will of God or of creatures.

XIV. God produces different substances according to the different views which he has of the world, and by the intervention of God, the appropriate nature of each substance brings it about that what happens to one corresponds to what happens to all the others, without, however, their acting upon one another directly.

AFTER HAVING SEEN, to a certain extent, in what the nature of substances consists, we must try to explain the dependence they have upon one another and their actions and passions. Now it is first of all very evident that created substances depend upon God who preserves them and can produce them continually by a kind of emanation just as we produce our thoughts, for when God turns, so to say, on all sides and in all fashions, the general system of phenomena which he finds it good to produce for the sake of manifesting his glory, and when he regards all the aspects of the world in all possible manners, since there is no relation which escapes his omniscience, the result of each view of the universe as seen from a different position is a substance which expresses the universe conformably to this view, provided God sees fit to render his thought effective and to produce the substance, and since God's vision is always true, our perceptions are always true and that which deceives us are our judgments, which are of us. Now we have said before, and it follows from what we have just said that each substance is a world by itself, independent of everything else excepting God; therefore, all our phenomena that is all things which are ever able to happen to us, are only consequences of our being. Now as the phenomena maintain a certain order conformably to our nature, or so to speak to the world which is in us (from whence it follows that we can, for the regulation of our conduct, make useful observations which are justified by the outcome of the

future phenomena) and as we are thus able often to judge the future by the past without deceiving ourselves, we have sufficient grounds for saying that these phenomena are true and we will not be put to the task of inquiring whether they are outside of us, and whether others perceive them also.

Nevertheless it is most true that the perceptions and expressions of all substances intercorrespond, so that each one following independently certain reasons or laws which he has noticed meets others which are doing the same, as when several have agreed to meet together in a certain place on a set day, they are able to carry out the plan if they wish. Now although all express the same phenomena, this does not bring it about that their expressions are exactly alike. It is sufficient if they are proportional. As when several spectators think they see the same thing and are agreed about it, although each one sees or speaks according to the measure of his vision. It is God alone, (from whom all individuals emanate continually, and who sees the universe not only as they see it, but besides in a very different way from them) who is the cause of this correspondence in their phenomena and who brings it about that that which is particular to one, is also common to all, otherwise there would be no relation. In a way, then, we might properly say, although it seems strange, that a particular substance never acts upon another particular substance nor is it acted upon by it. That which happens to each one is only the consequence of its complete idea or concept, since this idea already includes all the predicates and expresses the whole universe. In fact nothing can happen to us except thoughts and perceptions, and all our thoughts and perceptions are but the consequence, contingent it is true, of our precedent thoughts and perceptions, in such a way that were I able to consider directly all that happens or appears to me at the present time, I should be able to see all that will happen to me or that will ever appear to me. This future will not fail me, and will surely appear to me even

if all that which is outside of me were destroyed, save only that God and myself were left.

Since, however, we ordinarily attribute to other things an action upon us which brings us to perceive things in a certain manner, it is necessary to consider the basis of this judgment and to inquire what there is of truth in it.

XV. The action of one finite substance upon another consists only in the increase in the degrees of the expression of the first combined with a decrease in that of the second, in so far as God has in advance fashioned them so that they shall act in accord.

WITHOUT ENTERING INTO a long discussion it is sufficient for reconciling the language of metaphysics with that of practical life to remark that we preferably attribute to ourselves, and with reason, the phenomena which we express the most perfectly, and that we attribute to other substances those phenomena which each one expresses the best. Thus a substance, which is of an infinite extension in so far as it expresses all, becomes limited in proportion to its more or less perfect manner of expression. It is thus then that we may conceive of substances as interfering with and limiting one another, and hence we are able to say that in this sense they act upon one another, and that they, so to speak, accommodate themselves to one another. For it can happen that a single change which augments the expression of the one may diminish that of the other. Now the virtue of a particular substance is to express well the glory of God, and the better it expresses it, the less is it limited. Everything when it expresses its virtue or power, that is to say, when it acts, changes to better, and expands just in so far as it acts. When therefore a change occurs by which several substances are affected (in fact every change affects them all) I think we may say that those substances, which by this change pass immediately to a greater degree of perfection, or to a more perfect expression, exert power and act, while those which pass to a lesser degree disclose their weakness and suffer. I also hold that every activity of a substances which has perception implies some pleasure, and every passion some pain, except that

it may very well happen that a present advantage will be eventually destroyed by a greater evil, whence it comes that one may sin in acting or exerting his power and in finding pleasure.

XVI. The extraordinary intervention of God is not excluded in that which our particular essences express, because their expression includes everything. Such intervention, however, goes beyond the power of our natural being or of our distinct expression, because these are finite, and follow certain subordinate regulations.

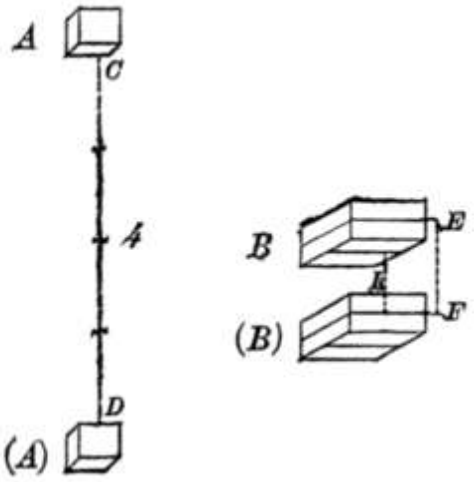
THERE REMAINS FOR us at present only to explain how it is possible that God has influence at times upon men or upon other substances by an extraordinary or miraculous intervention, since it seems that nothing is able to happen which is extraordinary or supernatural in as much as all the events which occur to the other substances are only the consequences of their natures. We must recall what was said above in regard to the miracles in the universe. These always conform to the universal law of the general order, although they may contravene the subordinate regulations, and since every person or substance is like a little world which expresses the great world, we can say that this extraordinary action of God upon this substance is nevertheless miraculous, although it is comprised in the general order of the universe in so far as it is expressed by the individual essence or concept of this substance. This is why, if we understand in our natures all that they express, nothing is supernatural in them, because they reach out to everything, an effect always expressing its cause, and God being the veritable cause of the substances. But as that which our natures express the most perfectly pertains to them in a particular manner, that being their special power, and since they are limited, as I have just explained, many things there are which surpass the powers of our natures and even of all limited natures. As a consequence, to speak more clearly, I say that the miracles and the extraordinary interventions of God have this peculiarity

that they cannot be foreseen by any created mind however enlightened. This is because the distinct comprehension of the fundamental order surpasses them all, while on the other hand, that which is called natural depends upon less fundamental regulations which the creatures are able to understand. In order then that my words may be as irreprehensible as the meaning I am trying to convey, it will be well to associate certain words with certain significations. We may call that which includes everything that we express and which expresses our union with God himself, nothing going beyond it, our essence. But that which is limited in us may be designated as our nature or our power and in accordance with this terminology that which goes beyond the natures of all created substances is supernatural.

XVII. An example of a subordinate regulation in the law of nature which demonstrates that God always preserves the same amount of force but not the same quantity of motion: — against the Cartesians and many others.

I HAVE FREQUENTLY spoken of subordinate regulations, or of the laws of nature, and it seems that it will be well to give an example. Our new philosophers are unanimous in employing that famous law that God always preserves the same amount of motion in the universe. In fact it is a very plausible law, and in times past I held it for indubitable. But since then I have learned in what its fault consists. Monsieur Descartes and many other clever mathematicians have thought that the quantity of motion, that is to say the velocity multiplied by the mass [This term is employed here for the sake of clearness. Leibniz did not possess the concept "mass," which was enunciated by Newton in the same year in which the present treatise was written, Leibniz uses the terms "body," "magnitude of body," etc. The technical expression "mass" occurs once only in the writings of Leibniz (in a treatise published in), and was there doubtless borrowed from Newton. For the history of the controversy concerning the Cartesian and Leibnizian measure of force, see Mach's Science of Mechanics, Chicago,, pp. et seq. — Trans.] of the moving body, is exactly equivalent to the moving force, or to speak in mathematical terms that the force varies as the velocity multiplied by the mass. Now it is reasonable that the same force is always preserved in the universe. So also, looking to phenomena, it will be readily seen that a mechanical perpetual motion is impossible, because the force in such a machine, being always diminished a little by friction and so ultimately destined to be entirely spent, would necessarily have to recoup its losses, and consequently would keep on increasing of itself without any new impulsion from without; and we see furthermore that the force of a body is diminished only in proportion as it gives up force, either to a contiguous body or to its own parts, in so far as they have a separate movement. The

mathematicians to whom I have referred think that what can be said of force can be said of the quantity of motion. In order, however, to show the difference I make two suppositions: in the first place, that a body falling from a certain height acquires a force enabling it to remount to the same height, provided that its direction is turned that way, or provided that there are no hindrances. For instance, a pendulum will rise exactly to the height from which it has fallen, provided the resistance of the air and of certain other small particles do not diminish a little its acquired force.



I suppose in the second place that it will take as much force to lift a body A weighing one pound to the height CD, four feet, as to raise a body B weighing four pounds to the height EF, one foot. These two suppositions are granted by our new philosophers. It is therefore manifest that the body A falling from the height CD acquires exactly as much force as the body B falling from the height EF, for the body B at F, having by the first supposition sufficient force to return to E, has therefore the force to carry a body of four pounds to the distance of one foot, EF. And likewise the body A at D, having the force to return to C, has also the force required to carry a body weighing one pound, its own weight, back to C, a distance of four feet. Now by the second supposition the force of these two bodies is equal. Let us now see if the quantity of motion is the same in each case. It is here that we will be surprised to find a very great difference, for it has been proved by Galileo that the velocity acquired by the fall CD is double the velocity acquired by the fall EF, although the height is four times as great. Multiplying, therefore, the body A, whose mass is 1, by its velocity, which is 2, the product or the quantity of movement will be 2, and on the other hand, if we multiply the body B, whose mass is 4, by its velocity, which is 1, the product or quantity of motion will be 4. Hence the quantity of the motion of the body A at the point D is half the quantity of motion of the body B at the point F, yet their forces are equal, and there is therefore a great difference between the quantity of motion and the force.

This is what we set out to show. We can see therefore how the force ought to be estimated by the quantity of the effect which it is able to produce, for example by the height to which a body of certain weight can be raised. This is a very different thing from the velocity which can be imparted to it, and in order to impart to it double the velocity we must have double the force. Nothing is simpler than this proof and Monsieur Descartes has fallen into error here, only because he trusted too much to his thoughts even when they had not been ripened by reflection. But it astonishes me that his disciples have not noticed this error, and I am afraid that they are beginning to imitate little by little certain Peripatetics whom they ridicule, and that they are accustoming themselves to consult rather the books of their master, than reason or nature.

XVIII. The distinction between force and the quantity of motion is, among other reasons, important as showing that we must have recourse to metaphysical considerations in addition to discussions of extension if we wish to explain the phenomena of matter.

THIS CONSIDERATION OF the force, distinguished from the quantity of motion is of importance, not only in physics and mechanics for finding the real laws of nature and the principles of motion, and even for correcting many practical errors which have crept into the writings of certain able mathematicians, but also in metaphysics it is of importance for the better understanding of principles. Because motion, if we regard only its exact and formal meaning, that is, change of place, is not something entirely real, and when several bodies change their places reciprocally, it is not possible to determine by considering the bodies alone to which among them movement or repose is to be attributed, as I could demonstrate geometrically, if I wished to stop for it now. But the force, or the proximate cause of these changes is something more real, and there are sufficient grounds for attributing it to one body rather than to another, and it is only through this latter investigation that we can determine to which one the movement must appertain. Now this force is something different from size, from form or from motion, and it can be seen from this consideration that the whole meaning of a body is not exhausted in its extension together with its modifications as our moderns persuade themselves. We are therefore obliged to restore certain beings or forms which they have banished. It appears more and more clear that although all the particular phenomena of nature can be explained mathematically or mechanically by those who understand them, yet nevertheless, the general principles of corporeal nature

and even of mechanics are metaphysical rather than geometric, and belong rather to certain indivisible forms or natures as the causes of the appearances, than to the corporeal mass or to extension. This reflection is able to reconcile the mechanical philosophy of the moderns with the circumspection of those intelligent and well-meaning persons who, with a certain justice, fear that we are becoming too far removed from immaterial beings and that we are thus prejudicing piety.

XIX. The utility of final causes in Physics.

As I do not wish to judge people in ill part I bring no accusation against our new philosophers who pretend to banish final causes from physics, but I am nevertheless obliged to avow that the consequences of such a banishment appear to me dangerous, especially when joined to that position which I refuted at the beginning of this treatise. That position seemed to go the length of discarding final causes entirely as though God proposed no end and no good in his activity, or as if good were not to be the object of his will. I hold on the contrary that it is just in this that the principle of all existences and of the laws of nature must be sought, hence God always proposes the best and most perfect. I am quite willing to grant that we are liable to err when we wish to determine the purposes or councils of God, but this is the case only when we try to limit them to some particular design, thinking that he has had in view only a single thing, while in fact he regards everything at once. As for instance, if we think that God has made the world only for us, it is a great blunder, although it may be quite true that he has made it entirely for us, and that there is nothing in the universe which does not touch us and which does not accommodate itself to the regard which he has for us according to the principle laid down above. Therefore when we see some good effect or some perfection which happens or which follows from the works of God we are able to say assuredly that God has purposed it, for he does nothing by chance, and is not like us who sometimes fail to do well. Therefore, far from being able to fall into error in this respect as do the extreme statesmen who postulate too much foresight in the designs of Princes, or as do commentators who seek for too much erudition in their authors, it will be impossible to attribute too much reflection to God's

infinite wisdom, and there is no matter in which error is less to be feared provided we confine ourselves to affirmations and provided we avoid negative statements which limit the designs of God. All those who see the admirable structure of animals find themselves led to recognize the wisdom of the author of things and I advise those who have any sentiment of piety and indeed of true philosophy to hold aloof from the expressions of certain pretentious minds who instead of saying that eyes were made for seeing, say that we see because we find ourselves having eyes. When one seriously holds such opinions which hand everything over to material necessity or to a kind of chance (although either alternative ought to appear ridiculous to those who understand what we have explained above) it is difficult to recognize an intelligent author of nature. The effect should correspond to its cause and indeed it is best known through the recognition of its cause, so that it is reasonable to introduce a sovereign intelligence ordering things, and in place of making use of the wisdom of this sovereign being, to employ only the properties of matter to explain phenomena. As if in order to account for the capture of an important place by a prince, the historian should say it was because the particles of powder in the cannon having been touched by a spark of fire expanded with a rapidity capable of pushing a hard solid body against the walls of the place, while the little particles which composed the brass of the cannon were so well interlaced that they did not separate under this impact, — as if he should account for it in this way instead of making us see how the foresight of the conqueror brought him to choose the time and the proper means and how his ability surmounted all obstacles.

XX. A noteworthy disquisition in Plato's Phaedo against the philosophers who were too materialistic.

THIS REMINDS ME of a fine disquisition by Socrates in Plato's Phaedo, which agrees perfectly with my opinion on this subject and seems to have been uttered expressly for our too materialistic philosophers. This agreement has led me to a desire to translate it although it is a little long. Perhaps this example will give some of us an incentive to share in many of the other beautiful and well balanced thoughts which are found in the writings of this famous author.[There is a gap here in the MS. intended for the passage from Plato, the translation of which Leibniz did not supply. — *Trans*.]

XXI. If the mechanical laws depended upon Geometry alone without metaphysical influences, the phenomena would be very different from what they are.

NOW SINCE THE wisdom of God has always been recognized in the detail of the mechanical structures of certain particular bodies, it should also be shown in the general economy of the world and in the constitution of the laws of nature. This is so true that even in the laws of motion in general, the plans of this wisdom have been noticed. For if bodies were only extended masses, and motion were only a change of place, and if everything ought to be and could be deduced by geometric necessity from these two definitions alone, it would follow, as I have shown elsewhere, that the smallest body on contact with a very large one at rest would impart to it its own velocity, yet without losing any of the velocity that it had. A quantity of other rules wholly contrary to the formation of a system would also have to be admitted. But the decree of the divine wisdom in preserving always the same force and the same total direction has provided for a system. I find indeed that many of the effects of nature can be accounted for in a twofold way, that is to say by a consideration of efficient causes, and again independently by a consideration of final causes. An example of the latter is God's decree to always carry out his plan by the easiest and most determined way. I have shown this elsewhere in accounting for the catoptric and dioptric laws, and I will speak more at length about it in what follows.

XXII. Reconciliation of the two methods of explanation, the one using final causes, and the other efficient causes, thus satisfying both those who explain nature mechanically and those who have recourse to incorporeal natures.

IT IS WORTH while to make the preceding remark in order to reconcile those who hope to explain mechanically the formation of the first tissue of an animal and all the interrelation of the parts, with those who account for the same structure by referring to final causes. Both explanations are good; both are useful not only for the admiring of the work of a great artificer, but also for the discovery of useful facts in physics and medicine. And writers who take these diverse routes should not speak ill of each other. For I see that those who attempt to explain beauty by the divine anatomy ridicule those who imagine that the apparently fortuitous flow of certain liquids has been able to produce such a beautiful variety and that they regard them as overbold and irreverent. These others on the contrary treat the former as simple and superstitious, and compare them to those ancients who regarded the physicists as impious when they maintained that not Jupiter thundered but some material which is found in the clouds. The best plan would be to join the two ways of thinking. To use a practical comparison, we recognize and praise the ability of a workman not only when we show what designs he had in making the parts of his machine, but also when we explain the instruments which he employed in making each part, above all if these instruments are simple and ingeniously contrived. God is also a workman able enough to produce a machine still a thousand times more ingenious than is our body, by employing only certain quite simple liquids purposely composed in such a way that ordinary laws of nature alone are required to

develop them so as to produce such a marvellous effect. But it is also true that this development would not take place if God were not the author of nature. Yet I find that the method of efficient causes, which goes much deeper and is in a measure more immediate and *a priori*, is also more difficult when we come to details, and I think that our philosophers are still very frequently far removed from making the most of this method. The method of final causes, however, is easier and can be frequently employed to find out important and useful truths which we should have to seek for a long time, if we were confined to that other more physical method of which anatomy is able to furnish many examples. It seems to me that Snellius, who was the first discoverer of the laws of refraction would have waited a long time before finding them if he had wished to seek out first how light was formed. But he apparently followed that method which the ancients employed for Catoptrics, that is, the method of final causes. Because, while seeking for the easiest way in which to conduct a ray of light from one given point to another given point by reflection from a given plane (supposing that that was the design of nature) they discovered the equality of the angles of incidence and reflection, as can be seen from a little treatise by Heliodorus of Larissa and also elsewhere. This principle Mons. Snellius, I believe, and afterwards independently of him, M. Fermat, applied most ingeniously to refraction. For since the rays while in the same media always maintain the same proportion of sines, which in turn corresponds to the resistance of the media, it appears that they follow the easiest way, or at least that way which is the most determinate for passing from a given point in one medium to a given point in another medium. That demonstration of this same theorem which M. Descartes has given, using efficient causes, is much less satisfactory. At least we have grounds to think that he would never have found the principle by that means if he had not learned in Holland of the discovery of Snellius.

XXIII. Returning to immaterial substances we explain how God acts upon the understanding of spirits and ask whether one always keeps the idea of what he thinks about.

I HAVE THOUGHT it well to insist a little upon final causes, upon incorporeal natures and upon an intelligent cause with respect to bodies so as to show the use of these conceptions in physics and in mathematics. This for two reasons, first to purge from mechanical philosophy the impiety that is imputed to it, second, to elevate to nobler lines of thought the thinking of our philosophers who incline to materialistic considerations alone. Now, however, it will be well to return from corporeal substances to the consideration of immaterial natures and particularly of spirits, and to speak of the methods which God uses to enlighten them and to act upon them. Although we must not forget that there are here at the same time certain laws of nature in regard to which I can speak more amply elsewhere. It will be enough for now to touch upon ideas and to inquire if we see everything in God and how God is our light. First of all it will be in place to remark that the wrong use of ideas occasions many errors. For when one reasons in regard to anything, he imagines that he has an idea of it and this is the foundation upon which certain philosophers, ancient and modern, have constructed a demonstration of God that is extremely imperfect. It must be, they say, that I have an idea of God, or of a perfect being, since I think of him and we cannot think without having ideas; now the idea of this being includes all perfections and since existence is one of these perfections, it follows that he exists. But I reply, inasmuch as we often think of impossible chimeras, for example of the highest degree of swiftness, of the greatest number, of the meeting of the conchoid with its base or determinant, such

reasoning is not sufficient. It is therefore in this sense that we can say that there are true and false ideas according as the thing which is in question is possible or not. And it is when he is assured of the possibility of a thing, that one can boast of having an idea of it. Therefore, the aforesaid argument proves that God exists, if he is possible. This is in fact an excellent privilege of the divine nature, to have need only of a possibility or an essence in order to actually exist, and it is just this which is called *ens a se*.

XXIV. What clear and obscure, distinct and confused, adequate and inadequate, intuitive and assumed knowledge is, and the definition of nominal, real, causal and essential.

IN ORDER TO understand better the nature of ideas it is necessary to touch somewhat upon the various kinds of knowledge. When I am able to recognize a thing among others, without being able to say in what its differences or characteristics consist, the knowledge is confused. Sometimes indeed we may know clearly, that is without being in the slightest doubt, that a poem or a picture is well or badly done because there is in it an "I know not what" which satisfies or shocks us. Such knowledge is not yet distinct. It is when I am able to explain the peculiarities which a thing has, that the knowledge is called distinct. Such is the knowledge of an assayer who discerns the true gold from the false by means of certain proofs or marks which make up the definition of gold. But distinct knowledge has degrees, because ordinarily the conceptions which enter into the definitions will themselves have need of definition, and are only known confusedly. When at length everything which enters into a definition or into distinct knowledge is known distinctly, even back to the primitive conception, I call that knowledge adequate. When my mind understands at once and distinctly all the primitive ingredients of a conception, then we have intuitive knowledge. This is extremely rare as most human knowledge is only confused or indeed assumed. It is well also to distinguish nominal from real definition. I call a definition nominal when there is doubt whether an exact conception of it is possible; as for instance, when I say that an endless screw is a line in three dimensional space whose parts are congruent or fall one upon another. Now although this is one of the reciprocal properties of

an endless screw, he who did not know from elsewhere what an endless screw was could doubt if such a line were possible, because the other lines whose ends are congruent (there are only two: the circumference of a circle and the straight line) are plane figures, that is to say they can be described *in plano*. This instance enables us to see that any reciprocal property can serve as a nominal definition, but when the property brings us to see the possibility of a thing it makes the definition real, and as long as one has only a nominal definition he cannot be sure of the consequences which he draws, because if it conceals a contradiction or an impossibility he would be able to draw the opposite conclusions. That is why truths do not depend upon names and are not arbitrary, as some of our new philosophers think. There is also a considerable difference among real definitions, for when the possibility proves itself only by experience, as in the definition of quicksilver, whose possibility we know because such a body, which is both an extremely heavy fluid and quite volatile, actually exists, the definition is merely real and nothing more. If, however, the proof of the possibility is *a priori*, the definition is not only real but also causal as for instance when it contains the possible generation of a thing. Finally when the definition, without assuming anything which requires a proof *a priori* of its possibility, carries the analysis clear to the primitive conception, the definition is perfect or essential.

XXV. In what cases knowledge is added to mere contemplation of the idea.

NOW IT IS manifest that we have no idea of a conception when it is impossible. And in case the knowledge, where we have the idea of it, is only assumed, we do not visualize it because such a conception is known only in like manner as conceptions internally impossible. And if it be in fact possible, it is not by this kind of knowledge that we learn its possibility. For instance, when I am thinking of a thousand or of a chiliagon, I frequently do it without contemplating the idea. Even if I say a thousand is ten times a hundred, I frequently do not trouble to think what ten and a hundred are, because I assume that I know, and I do not consider it necessary to stop just at present to conceive of them. Therefore it may well happen, as it in fact does happen often enough, that I am mistaken in regard to a conception which I assume that I understand, although it is an impossible truth or at least is incompatible with others with which I join it, and whether I am mistaken or not, this way of assuming our knowledge remains the same. It is, then, only when our knowledge is clear in regard to confused conceptions, and when it is intuitive in regard to those which are distinct, that we see its entire idea.

XXVI. Ideas are all stored up within us. Plato's doctrine of reminiscence.

IN ORDER TO see clearly what an idea is, we must guard ourselves against a misunderstanding. Many regard the idea as the form or the differentiation of our thinking, and according to this opinion we have the idea in our mind, in so far as we are thinking of it, and each separate time that we think of it anew we have another idea although similar to the preceding one. Some, however, take the idea as the immediate object of thought, or as a permanent form which remains even when we are no longer contemplating it. As a matter of fact our soul has the power of representing to itself any form or nature whenever the occasion comes for thinking about it, and I think that this activity of our soul is, so far as it expresses some nature, form or essence, properly the idea of the thing. This is in us, and is always in us, whether we are thinking of it or no. (Our soul expresses God and the universe and all essences as well as all existences.) This position is in accord with my principles that naturally nothing enters into our minds from outside.

It is a bad habit we have of thinking as though our minds receive certain messengers, as it were, or as if they had doors or windows. We have in our minds all those forms for all periods of time because the mind at every moment expresses all its future thoughts and already thinks confusedly of all that of which it will ever think distinctly. Nothing can be taught us of which we have not already in our minds the idea. This idea is as it were the material out of which the thought will form itself. This is what Plato has excellently brought out in his doctrine of reminiscence, a doctrine which contains a great deal of truth, provided that it is properly understood and

purged of the error of pre-existence, and provided that one does not conceive of the soul as having already known and thought at some other time what it learns and thinks now. Plato has also confirmed his position by a beautiful experiment. He introduces a small boy, whom he leads by short steps, to extremely difficult truths of geometry bearing on incommensurables, all this without teaching the boy anything, merely drawing out replies by a well arranged series of questions. This shows that the soul virtually knows those things, and needs only to be reminded (animadverted) to recognize the truths. Consequently it possesses at least the idea upon which those truths depend. We may say even that it already possesses those truths, if we consider them as the relations of the ideas.

XXVII. In what respect our souls can be compared to blank tablets and how conceptions are derived from the senses.

ARISTOTLE PREFERRED TO compare our souls to blank tablets prepared for writing, and he maintained that nothing is in the understanding which does not come through the senses. This position is in accord with the popular conceptions as Aristotle's positions usually are. Plato thinks more profoundly. Such tenets or practicologies are nevertheless allowable in ordinary use somewhat in the same way as those who accept the Copernican theory still continue to speak of the rising and setting of the sun. I find indeed that these usages can be given a real meaning containing no error, quite in the same way as I have already pointed out that we may truly say particular substances act upon one another. In this same sense we may say that knowledge is received from without through the medium of the senses because certain exterior things contain or express more particularly the causes which determine us to certain thoughts. Because in the ordinary uses of life we attribute to the soul only that which belongs to it most manifestly and particularly, and there is no advantage in going further. When, however, we are dealing with the exactness of metaphysical truths, it is important to recognize the powers and independence of the soul which extend infinitely further than is commonly supposed. In order, therefore, to avoid misunderstandings it would be well to choose separate terms for the two. These expressions which are in the soul whether one is conceiving of them or not may be called ideas, while those which one conceives of or constructs may be called conceptions, *conceptus*. But whatever terms are used, it is always false to say that all our conceptions come from the so-called external senses, because those conceptions which I have of myself

and of my thoughts, and consequently of being, of substance, of action, of identity, and of many others came from an inner experience.

XXVIII. The only immediate object of our perceptions which exists outside of us is God, and in him alone is our light.

IN THE STRICTLY metaphysical sense no external cause acts upon us excepting God alone, and he is in immediate relation with us only by virtue of our continual dependence upon him. Whence it follows that there is absolutely no other external object which comes into contact with our souls and directly excites perceptions in us. We have in our souls ideas of everything, only because of the continual action of God upon us, that is to say, because every effect expresses its cause and therefore the essences of our souls are certain expressions, imitations or images of the divine essence, divine thought and divine will, including all the ideas which are there contained. We may say, therefore, that God is for us the only immediate external object, and that we see things through him. For example, when we see the sun or the stars, it is God who gives to us and preserves in us the ideas and whenever our senses are affected according to his own laws in a certain manner, it is he, who by his continual concurrence, determines our thinking. God is the sun and the light of souls, *lumen illuminans omnem hominem venientem in hunc mundum*, although this is not the current conception. I think I have already remarked that during the scholastic period many believed God to be the light of the soul, *intellectus agens animæ rationalis*, following in this the Holy Scriptures and the fathers who were always more Platonic than Aristotelian in their mode of thinking. The Averroists misused this conception, but others, among whom were several mystic theologians, and William of Saint Amour, also I think, understood this conception in a manner which assured the dignity of God and was able to raise the soul to a knowledge of its welfare.

XXIX. Yet we think directly by means of our own ideas and not through God's.

NEVERTHELESS I CANNOT approve of the position of certain able philosophers who seem to hold that our ideas themselves are in God and not at all in us. I think that in taking this position they have neither sufficiently considered the nature of substance, which we have just explained, nor the entire extension and independence of the soul which includes all that happens to it, and expresses God, and with him all possible and actual beings in the same way that an effect expresses its cause. It is indeed inconceivable that the soul should think using the ideas of something else. The soul when it thinks of anything must be affected effectively in a certain manner, and it must needs have in itself in advance not only the passive capacity of being thus affected, a capacity already wholly determined, but it must have besides an active power by virtue of which it has always had in its nature the marks of the future production of this thought, and the disposition to produce it at its proper time. All of this shows that the soul already includes the idea which is comprised in any particular thought.

XXX. How God inclines our souls without necessitating them; that there are no grounds for complaint; that we must not ask why Judas sinned because this free act is contained in his concept, the only question being why Judas the sinner is admitted to existence, preferably to other possible persons; concerning the original imperfection or limitation before the fall and concerning the different degrees of grace.

REGARDING THE ACTION of God upon the human will there are many quite different considerations which it would take too long to investigate here. Nevertheless the following is what can be said in general. God in co-operating with ordinary actions only follows the laws which he has established, that is to say, he continually preserves and produces our being so that the ideas come to us spontaneously or with freedom in that order which the concept of our individual substance carries with itself. In this concept they can be foreseen for all eternity. Furthermore, by virtue of the decree which God has made that the will shall always seek the apparent good in certain particular respects (in regard to which this apparent good always has in it something of reality expressing or imitating God's will), he, without at all necessitating our choice, determines it by that which appears most desirable. For absolutely speaking, our will as contrasted with necessity, is in a state of indifference, being able to act otherwise, or wholly to suspend its action, either alternative being and remaining possible. It therefore devolves upon the soul to be on guard against appearances, by means of a firm will, to reflect and to refuse to act or decide in certain circumstances, except after mature deliberation. It is, however, true and has been assured from all eternity that certain souls will not employ their power upon certain occasions.

But who could do more than God has done, and can such a soul complain of anything except itself? All these complaints after the deed are unjust, inasmuch as they would have been unjust before the deed. Would this soul a little before committing the sin have had the right to complain of God as though he had determined the sin. Since the determinations of God in these matters cannot be foreseen, how would the soul know that it was preordained to sin unless it had already committed the sin? It is merely a question of wishing to or not wishing to, and God could not have set an easier or juster condition. Therefore all judges without asking the reasons which have disposed a man to have an evil will, consider only how far this will is wrong. But, you object, perhaps it is ordained from all eternity that I will sin. Find your own answer. Perhaps it has not been. Now then, without asking for what you are unable to know and in regard to which you can have no light, act according to your duty and your knowledge. But, some one will object; whence comes it then that this man will assuredly do this sin? The reply is easy. It is that otherwise he would not be a man. For God foresees from all time that there will be a certain Judas, and in the concept or idea of him which God has, is contained this future free act. The only question, therefore, which remains is why this certain Judas, the betrayer who is possible only because of the idea of God, actually exists. To this question, however, we can expect no answer here on earth excepting to say in general that it is because God has found it good that he should exist notwithstanding that sin which he foresaw. This evil will be more than overbalanced. God will derive a greater good from it, and it will finally turn out that this series of events in which is included the existence of this sinner, is the most perfect among all the possible series of events. An explanation in every case of the admirable economy of this choice cannot be given while we are sojourners on earth. It is enough to know the excellence without understanding it. It is here that must be recognized

altitudinem divitiarum, the unfathomable depth of the divine wisdom, without hesitating at a detail which involves an infinite number of considerations. It is clear, however, that God is not the cause of ill. For not only after the loss of innocence by men, has original sin possessed the soul, but even before that there was an original limitation or imperfection in the very nature of all creatures, which rendered them open to sin and able to fall. There is, therefore, no more difficulty in the supralapsarian view than there is in the other views of sin. To this also, it seems to me can be reduced the opinion of Saint Augustine and of other authors: that the root of evil is in the negativity, that is to say, in the lack or limitation of creatures which God graciously remedies by whatever degree of perfection it pleases him to give. This grace of God, whether ordinary or extraordinary has its degrees and its measures. It is always efficacious in itself to produce a certain proportionate effect and furthermore it is always sufficient not only to keep one from sin but even to effect his salvation, provided that the man co-operates with that which is in him. It has not always, however, sufficient power to overcome the inclination, for, if it did, it would no longer be limited in any way, and this superiority to limitations is reserved to that unique grace which is absolutely efficacious. This grace is always victorious whether through its own self or through the congruity of circumstances.

XXXI. Concerning the motives of election; concerning faith foreseen and the absolute decree and that it all reduces to the question why God has chosen and resolved to admit to existence just such a possible person, whose concept includes just such a sequence of free acts and of free gifts of grace. This at once puts an end to all difficulties.

FINALLY, THE GRACE of God is wholly unprejudiced and creatures have no claim upon it. Just as it is not sufficient in accounting for God's choice in his dispensations of grace to refer to his absolute or conditional prevision of men's future actions, so it is also wrong to imagine his decrees as absolute with no reasonable motive. As concerns foreseen faith and good works, it is very true that God has elected none but those whose faith and charity he foresees, *quos se fide donaturum praescivit*. The same question, however, arises again as to why God gives to some rather than to others the grace of faith or of good works. As concerns God's ability to foresee not only the faith and good deeds, but also their material and predisposition, or that which a man on his part contributes to them (since there are as truly diversities on the part of men as on the part of grace, and a man although he needs to be aroused to good and needs to become converted, yet acts in accordance with his temperament), — as regards his ability to foresee there are many who say that God, knowing what a particular man will do without grace, that is without his extraordinary assistance, or knowing at least what will be the human contribution, resolves to give grace to those whose natural dispositions are the best, or at any rate are the least imperfect and evil. But if this were the case then the natural dispositions in so far as they were good would be like gifts of grace, since God would have given advantages to some over others; and therefore, since he would well know

that the natural advantages which he had given would serve as motives for his grace or for his extraordinary assistance, would not everything be reduced to his mercy? I think, therefore, that since we do not know how much and in what way God regards natural dispositions in the dispensations of his grace, it would be safest and most exact to say, in accordance with our principles and as I have already remarked, that there must needs be among possible beings the person Peter or John whose concept or idea contains all that particular sequence of ordinary and extraordinary manifestations of grace together with the rest of the accompanying events and circumstances, and that it has pleased God to choose him among an infinite number of persons equally possible for actual existence. When we have said this there seems nothing left to ask, and all difficulties vanish. For in regard to that great and ultimate question why it has pleased God to choose him among so great a number of possible persons, it is surely unreasonable to demand more than the general reasons which we have given. The reasons in detail surpass our ken. Therefore, instead of postulating an absolute decree, which being without reason would be unreasonable, and instead of postulating reasons which do not succeed in solving the difficulties and in turn have need themselves of reasons, it will be best to say with St. Paul that there are for God's choice certain great reasons of wisdom and congruity which he follows, which reasons, however, are unknown to mortals and are founded upon the general order, whose goal is the greatest perfection of the world. This is what is meant when the motives of God's glory and of the manifestation of his justice are spoken of, as well as when men speak of his mercy, and his perfection in general; that immense vastness of wealth, in fine, with which the soul of the same St. Paul was to thrilled.

XXXII. Usefulness of these principles in matters of piety and of religion.

IN ADDITION IT seems that the thoughts which we have just explained and particularly the great principle of the perfection of God's operations and the concept of substance which includes all its changes with all its accompanying circumstances, far from injuring, serve rather to confirm religion, serve to dissipate great difficulties, to inflame souls with a divine love and to raise the mind to a knowledge of incorporeal substances much more than the present-day hypotheses. For it appears clearly that all other substances depend upon God just as our thoughts emanate from our own substances; that God is all in all and that he is intimately united to all created things, in proportion however to their perfection; that it is he alone who determines them from without by his influence, and if to act is to determine directly, it may be said in metaphysical language that God alone acts upon me and he alone causes me to do good or ill, other substances contributing only because of his determinations; because God, who takes all things into consideration, distributes his bounties and compels created beings to accommodate themselves to one another. Thus God alone constitutes the relation or communication between substances. It is through him that the phenomena of the one meet and accord with the phenomena of the others, so that there may be a reality in our perceptions. In common parlance, however, an action is attributed to particular causes in the sense that I have explained above because it is not necessary to make continual mention of the universal cause when speaking of particular cases. It can be seen also that every substance has a perfect spontaneity (which becomes liberty with intelligent substances). Everything which happens to it is a

consequence of its idea or its being and nothing determines it except God only. It is for this reason that a person of exalted mind and revered saintliness may say that the soul ought often to think as if there were only God and itself in the world. Nothing can make us hold to immortality more firmly than this independence and vastness of the soul which protects it completely against exterior things, since it alone constitutes our universe and together with God is sufficient for itself. It is as impossible for it to perish save through annihilation as it is impossible for the universe to destroy itself, the universe whose animate and perpetual expression it is. Furthermore, the changes in this extended mass which is called our body cannot possibly affect the soul nor can the dissipation of the body destroy that which is indivisible.

XXXIII. Explanation of the relation between the soul and the body, a matter which has been regarded as inexplicable or else as miraculous; concerning the origin of confused perceptions.

WE CAN ALSO see the explanation of that great mystery "the union of the soul and the body," that is to say how it comes about that the passions and actions of the one are accompanied by the actions and passions or else the appropriate phenomena of the other. For it is not possible to conceive how one can have an influence upon the other and it is unreasonable to have recourse at once to the extraordinary intervention of the universal cause in an ordinary and particular case. The following, however, is the true explanation. We have said that everything which happens to a soul or to any substance is a consequence of its concept; hence the idea itself or the essence of the soul brings it about that all of its appearances or perceptions should be born out of its nature and precisely in such a way that they correspond of themselves to that which happens in the universe at large, but more particularly and more perfectly to that which happens in the body associated with it, because it is in a particular way and only for a certain time according to the relation of other bodies to its own body that the soul expresses the state of the universe. This last fact enables us to see how our body belongs to us, without, however, being attached to our essence. I believe that those who are careful thinkers will decide favorably for our principles because of this single reason, viz. that they are able to see in what consists the relation between the soul and the body, a parallelism which appears inexplicable in any other way. We can also see that the perceptions of our senses even when they are clear must necessarily contain certain confused elements, for as all the bodies in the universe are in sympathy,

ours receives the impressions of all the others, and while our senses respond to everything, our soul cannot pay attention to every particular. That is why our confused sensations are the result of a variety of perceptions. This variety is infinite. It is almost like the confused murmuring which is heard by those who approach the shore of a sea. It comes from the continual beatings of innumerable waves. If now, out of many perceptions which do not at all fit together to make one, no particular one perception surpasses the others, and if they make impressions about equally strong or equally capable of holding the attention of the soul, they can be perceived only confusedly.

XXXIV. Concerning the difference between spirits and other substances, souls or substantial forms; that the immortality which men desire includes memory.

SUPPOSING THAT THE bodies which constitute a *unum per se*, as human bodies, are substances, and have substantial forms, and supposing that animals have souls, we are obliged to grant that these souls and these substantial forms cannot entirely perish, any more than can the atoms or the ultimate elements of matter, according to the position of other philosophers; for no substance perishes, although it may become very different. Such substances also express the whole universe, although more imperfectly than do spirits. The principle difference, however, is that they do not know that they are, nor what they are. Consequently, not being able to reason, they are unable to discover necessary and universal truths. It is also because they do not reflect regarding themselves that they have no moral qualities, whence it follows that undergoing a thousand transformations, as we see a caterpillar change into a butterfly, the result from a moral or practical standpoint is the same as if we said that they perished in each case, and we can indeed say it from the physical standpoint in the same way that we say bodies perish in their dissolution. But the intelligent soul, knowing that it is and having the ability to say that word “I” so full of meaning, not only continues and exists, metaphysically far more certainly than do the others, but it remains the same from the moral standpoint, and constitutes the same personality, for it is its memory or knowledge of this ego which renders it open to punishment and reward. Also the immortality which is required in morals and in religion does not consist merely in this perpetual existence, which pertains to all substances, for if in addition there were no remembrance of

what one had been, immortality would not be at all desirable. Suppose that some individual could suddenly become King of China on condition, however, of forgetting what he had been, as though being born again, would it not amount to the same practically, or as far as the effects could be perceived, as if the individual were annihilated, and a king of China were the same instant created in his place? The individual would have no reason to desire this.

XXXV. The excellence of spirits; that God considers them preferable to other creatures; that the spirits express God rather than the world, while other simple substances express the world rather than God.

IN ORDER, HOWEVER, to prove by natural reasons that God will preserve forever not only our substance, but also our personality, that is to say the recollection and knowledge of what we are (although the distinct knowledge is sometimes suspended during sleep and in swoons) it is necessary to join to metaphysics moral considerations. God must be considered not only as the principle and the cause of all substances and of all existing things, but also as the chief of all persons or intelligent substances, as the absolute monarch of the most perfect city or republic, such as is constituted by all the spirits together in the universe, God being the most complete of all spirits at the same time that he is greatest of all beings. For assuredly the spirits are the most perfect of substances and best express the divinity. Since all the nature, purpose, virtue and function of substances is, as has been sufficiently explained, to express God and the universe, there is no room for doubting that those substances which give the expression, knowing what they are doing and which are able to understand the great truths about God and the universe, do express God and the universe incomparably better than do those natures which are either brutish and incapable of recognizing truths, or are wholly destitute of sensation and knowledge. The difference between intelligent substances and those which are not intelligent is quite as great as between a mirror and one who sees. As God is himself the greatest and wisest of spirits it is easy to understand that the spirits with which he can, so to speak, enter into conversation and

even into social relations by communicating to them in particular ways his feelings and his will so that they are able to know and love their benefactor, must be much nearer to him than the rest of created things which may be regarded as the instruments of spirits. In the same way we see that all wise persons consider far more the condition of a man than of anything else however precious it may be; and it seems that the greatest satisfaction which a soul, satisfied in other respects, can have is to see itself loved by others. However, with respect to God there is this difference that his glory and our worship can add nothing to his satisfaction, the recognition of creatures being nothing but a consequence of his sovereign and perfect felicity and being far from contributing to it or from causing it even in part. Nevertheless, that which is reasonable in finite spirits is found eminently in him and as we praise a king who prefers to preserve the life of a man before that of the most precious and rare of his animals, we should not doubt that the most enlightened and most just of all monarchs has the same preference.

XXXVI. God is the monarch of the most perfect republic composed of all the spirits, and the happiness of this city of God is his principal purpose.

SPIRITS ARE OF all substances the most capable of perfection and their perfections are different in this that they interfere with one another the least, or rather they aid one another the most, for only the most virtuous can be the most perfect friends. Hence it follows that God who in all things has the greatest perfection will have the greatest care for spirits and will give not only to all of them in general, but even to each one in particular the highest perfection which the universal harmony will permit. We can even say that it is because he is a spirit that God is the originator of existences, for if he had lacked the power of will to choose what is best, there would have been no reason why one possible being should exist rather than any other. Therefore God's being a spirit himself dominates all the consideration which he may have toward created things. Spirits alone are made in his image, being as it were of his blood or as children in the family, since they alone are able to serve him of free will, and to act consciously imitating the divine nature. A single spirit is worth a whole world, because it not only expresses the whole world, but it also knows it and governs itself as does God. In this way we may say that though every substance expresses the whole universe, yet the other substances express the world rather than God, while spirits express God rather than the world. This nature of spirits, so noble that it enables them to approach divinity as much as is possible for created things, has as a result that God derives infinitely more glory from them than from the other beings, or rather the other beings furnish to spirits the material for glorifying him. This moral quality of God which constitutes him Lord and

Monarch of spirits influences him so to speak personally and in a unique way. It is through this that he humanizes himself, that he is willing to suffer anthropologies, and that he enters into social relations with us and this consideration is so dear to him that the happy and prosperous condition of his empire which consists in the greatest possible felicity of its inhabitants, becomes supreme among his laws. Happiness is to persons what perfection is to beings. And if the dominant principle in the existence of the physical world is the decree to give it the greatest possible perfection, the primary purpose in the moral world or in the city of God which constitutes the noblest part of the universe ought to be to extend the greatest happiness possible. We must not therefore doubt that God has so ordained everything that spirits not only shall live forever, because this is unavoidable, but that they shall also preserve forever their moral quality, so that his city may never lose a person, quite in the same way that the world never loses a substance. Consequently they will always be conscious of their being, otherwise they would be open to neither reward nor punishment, a condition which is the essence of a republic, and above all of the most perfect republic where nothing can be neglected. In fine, God being at the same time the most just and the most debonnaire of monarchs, and requiring only a good will on the part of men, provided that it be sincere and intentional, his subjects cannot desire a better condition. To render them perfectly happy he desires only that they love him.

XXXVII. Jesus Christ has revealed to men the mystery and the admirable laws of the kingdom of heaven, and the greatness of the supreme happiness which God has prepared for those who love him.

THE ANCIENT PHILOSOPHERS knew very little of these important truths. Jesus Christ alone has expressed them divinely well, and in a way so clear and simple that the dullest minds have understood them. His gospel has entirely changed the face of human affairs. It has brought us to know the kingdom of heaven, or that perfect republic of spirits which deserves to be called the city of God. He it is who has discovered to us its wonderful laws. He alone has made us see how much God loves us and with what care everything that concerns us has been provided for; how God, inasmuch as he cares for the sparrows, will not neglect reasoning beings, who are infinitely more dear to him; how all the hairs of our heads are numbered; how heaven and earth may pass away but the word of God and that which belongs to the means of our salvation will not pass away; how God has more regard for the least one among intelligent souls than for the whole machinery of the world; how we ought not to fear those who are able to destroy the body but are unable to destroy the soul, since God alone can render the soul happy or unhappy; and how the souls of the righteous are protected by his hand against all the upheavals of the universe, since God alone is able to act upon them; how none of our acts are forgotten; how everything is to be accounted for; even careless words and even a spoonful of water which is well used; in fact how everything must result in the greatest welfare of the good, for then shall the righteous become like suns

and neither our sense nor our minds have ever tasted of anything approaching the joys which God has laid up for those that love him.

A Philosopher's Creed (1673)

Original Title: 'Confessio philosophi'

Anonymous translation

Leibniz' early dialogue *Confessio philosophi* engages with what he believed to be the central task of *theodicy*: to uphold the justice of God. The dialogue explains his commitment to the claim that ours is the best possible world, offering an account of how such a world could include damnation. Various answers to the question why God is justified in permitting sin are suggested by Leibniz, examining the threat to God's justice raised by the doctrine of eternal damnation. Overall, the *Confessio philosophi* formulates a general account of God's relation to sin and evil, which would become an essential fixture of Leibniz' later philosophy. How can God be understood to be the ultimate cause, asks Leibniz, without God being considered as the author of sin, a conclusion incompatible with God's holiness? Leibniz' attempts to justify the way of God to man also led him to a detailed analysis of the nature of free choice, the problems of necessitarianism and fatalism, as well as the nature of divine justice and holiness.

Portrait of Leibniz by Andreas Scheits, 1710

A PHILOSOPHER'S CREED

Catechist Theologian: RECENTLY, we spoke at length about the mind's immortality and the logical necessity of a Governor of the world. If you continue to be so satisfying, I will have no trouble in teaching you. Now there awaits us the thorny consideration of God's justice, for nothing is used more often or so speciously to refute Providence than the disorder of things. Set about solving this with proper reasoning and refine it to my liking, so that when I reveal the light of revelations, it will be reflected in your ideas.

Catechumen Philosopher: This seems like a good arrangement, and fruitful for both sides. Begin asking!

Theologian: Then let's get to the point: do you believe God to be just?

Philosopher: I do indeed believe it, or rather, I know it.

Theologian: What do you call "God"?

Philosopher: An all-knowing and all-powerful essence.

Theologian: What is "to be just"?

Philosopher: He who loves everyone is just.

Theologian: But what is "to love"?

Philosopher: To delight in another's happiness.

Theologian: What is "to delight"?

Philosopher: To experience harmony.

Theologian: What then is “harmony”?

Philosopher: Similarity in diversity, or diversity compensated by unity.

Theologian: Given your definitions, God must love everyone, if he is to be just.

Philosopher: Certainly so.

Theologian: But you know that many people have denied this.

Philosopher: Several great men have denied it, but also sometimes affirmed it, by changing the sense of certain words.

Theologian: Perhaps we will get to that later; now I wish to see what argument you will use concerning God’s justice.

Philosopher: It will be formulated from the answers which you and I allow. Is it not generally agreed that God is all-knowing?

Theologian: What then?

Philosopher: Then God is always aware of the harmony in every thinkable thing.

Theologian: Granted.

Philosopher: Moreover, every happiness is harmonious, or beautiful.

Theologian: I admit that.

Philosopher: I'll prove it, so that others won't deny it. Happiness exists only in the mind.

Theologian: Right, since no one is happy without knowing it. (You know that old saying: How blessed are they that know their own blessings!) Whatever is conscious of its own condition is a mind. Therefore, only a mind can be happy.

Philosopher: Well argued! But at any rate, happiness is the state of mind most pleasing to the mind itself; yet in truth, the mind is most pleased by harmony.

Theologian: True enough, especially since we just agreed that "to delight" meant "to experience harmony".

Philosopher: Therefore, happiness is the most harmonious state of mind. Moreover, since the mind's nature is to consider, the harmony of the mind lies in considering harmony. Hence the greatest harmony of the mind, i.e. happiness, lies in the contemplation of the universal harmony (i.e. God) in the mind.

Theologian: Excellent: for the happiness of the mind and the contemplation of God are likewise shown to be the same.

Philosopher: Then I surpassed what I was trying to prove, namely that every happiness is harmonious.

Theologian: Now it is time for you to show that God loves everyone.

Philosopher: Consider it already done. If everyone's happiness is harmonious (as just proven) and if God is aware of every harmony (by the definition of "God") and if every experience of harmony is delightful (by

the definition of “delight”) then it follows that everyone’s happiness is pleasing to God. Therefore, by the definition of “love” given before, God loves everyone, and therefore God is just, from the definition of “just”.

Theologian: I would almost say that you had proven it. And I’m sure that none of those who deny universal grace could even argue with anything you’ve said, provided that they used the words in the same senses as you have, not departing from their usual meanings.

Philosopher: I believe my conclusion can be derived from their own way of thinking. For when they claim that God only loves the chosen, they like to point out that He loves some more than others (by the definition of “choose”) and also that not everyone can be saved, on account of the universal harmony, just as a picture is set off with shadows, or a consonance emphasized by surrounding dissonance. God *allows* the others who are less beloved to be rejected, which He does not desire (for God does not want the sinner’s death), but which the nature of things entails. So when it is said that God loved one and hated another, the meaning is that he loved the other less and therefore let him be rejected, since not everyone can be chosen. But when a lesser good is regarded like a condemnation, so a lesser love is made to seem like hatred when the two loves are compared, although hatred and condemnation are not appropriate words. But we oughtn’t really go into why God loves one more than another.

Theologian: But wait, that’s where we run into our biggest difficulties: see that you handle those as well.

Philosopher: To what difficulties are you referring?

Theologian: Here are the main ones: If God delights in everyone’s happiness, why doesn’t He make everyone happy? If He loves everyone,

why does He damn so many? If God is just, why does He seem so unfair, making out of the same clay (as it were) some vessels for honour and others for shame? And if God knowingly allows and tolerates sin in the world, when He could eliminate it, isn't He then responsible for the sin? Indeed, isn't God the instigator of all sin, since He created everything such that sin would result? And what of free will, given the necessity of sin, and what of the justice of punishment, if free will doesn't exist? What of the justice of rewards, if grace alone distinguishes the damned from the blessed? Lastly, if God is ultimately responsible for everything, what can we ascribe to people and devils?

Philosopher: I feel buried under this avalanche of questions!

Theologian: So let's take them one at a time. Don't you agree, above all, that everything has a reason?

Philosopher: I agree with that so strongly that I think it can be proven that it is possible (at least for an all-knowing being) to give a sufficient reason for everything, i.e. explain why each thing exists rather than not and why it is so-and-so and not otherwise. Whoever denies this overthrows the dividing line between what is and what is not. Whatever exists has at least everything needed for existence; and everything needed for existence, taken together, constitute a sufficient reason for existence. Therefore, whatever exists has a sufficient reason for existence.

Theologian: I have nothing against this proof, or rather, this supposition of the human race, or even against its practical application. For all men, when they experience something, particularly if it is unusual, ask "why?"; that is, they demand a reason for it, and either the immediate cause, or the originator's intention, if the originator is a rational being. From the word "why?" [*cur*] come the words "concern" [*cura*] and "curiosity" [*curiositas*],

just as the word “to ask” [*quaerere*] comes from the words “who?” [*quis*] and “what?” [*quae*]. And when given its reason, if they have time and the trouble seems worth it, people seek the reason for the given reason, and so on, until (on the one hand) philosophers run into something self-evident, something necessary which is its own reason, or (on the other hand) ordinary people run into something familiar and commonplace, at which point they stop.

Philosopher: There must be a sufficient reason for everything; otherwise, the foundations of the sciences would be overthrown. For just as arithmetic and geometry (the sciences of quantities) have the first principle “The whole is greater than a part”, so “Everything has a reason.” is the fundamental principle of physics and ethics, the sciences of qualities, or said another way, the sciences of action, thinking and motion, since a quality is a potential for changing and being changed. And surely you will admit that even the most trivial theorem of physics and ethics cannot be proven without assuming this proposition; moreover, the proof of God’s existence rests on this postulate.

Theologian: OK, so you admit that everything has a reason.

Philosopher: Well, why shouldn’t I, although I don’t see where the tedious proof of this obvious statement is leading.

Theologian: Pay attention for a minute and you’ll see what knotty problems derive from it. Now consider: Judas was damned.

Philosopher: Who doesn’t know that?

Theologian: Wasn’t it also for a reason?

Philosopher: Don't ask me things which you know I agreed to long ago.

Theologian: Then what was the reason?

Philosopher: I think the reason was the condition of the dying man, namely the burning hatred of God in which he died, and of which the nature of despair consists. But that is enough to be damned. For since the soul is not open to new, external sensations after death, after its body has been returned, the soul sticks to its last thoughts. These do not change but are intensified in death. But hating God, who is the Most Happy, leads to the greatest pain, since "to hate" is to be pained by the hated one's happiness, just as "to love" is to delight in the beloved's happiness. Therefore, if God's happiness is the greatest, so is Judas' pain. The greatest pain is wretchedness, or rather damnation; therefore, he who hates God in death, damns himself.

Theologian: But where does his hatred for God come from, or rather his desire to cause God harm?

Philosopher: From the assumption that God hates him, or bears him ill-will. For it is so astonishingly arranged by Providence that God in the end only harms those who fear Him like a slave, or rather, who take for granted that He will harm them; whereas whoever constantly believes himself preferred by God, makes himself so, because he loves God constantly.

Theologian: But why did Judas believe that God bore him ill-will?

Philosopher: Because he knew himself to be a rebel, he believed God to be a tyrant; knowing himself to be fallen, he believed God would not forgive him; knowing himself to be malicious, he believed God to be cruel; knowing himself barren of good things, he believed God unjust.

Theologian: You could've said it more succinctly: Judas was both penitent and despairing at the same time. But how did his soul come to this sorry state?

Philosopher: I can tell you will never stop questioning me! Judas was penitent because he knew himself, and despairing, because he was ignorant of God. He knew that he had sinned, and he believed that God would punish him; because God made him a rational being, he knew that he had sinned, for it was true. He had sinned in betraying his Teacher because he had been able to and because he had wanted to. God provided that Judas had been able to sin; and Judas had wanted to because it seemed good.

Theologian: But why did he think something evil was good? Likewise, after seeing his mistake, why did he despair?

Philosopher: Here we must look into the reasons for Judas' beliefs, since even despair is a belief about something. Every belief has two causes: the disposition of the believer and the nature of the subject of his belief. I do not take other pre-existing beliefs into account, since they can be considered as belonging to either the believer's disposition or to the subject of the belief, i.e. the state of the individual believer and the circumstances of things. Therefore, one cannot give the exact reason for Judas' misguided beliefs without detailing all the states of his mind, unaffected by objects, all the way back to his first disposition at birth.

Theologian: Aha! This is where I bring you up short. Sin comes from the ability to sin and the desire to sin. The ability is provided by God, whereas the desire comes from a belief about something and this belief comes from the disposition of the believer and the nature of the subject of the belief. But both of these last two elements come from God as well, so *everything* responsible for sin comes from God. Therefore, God is ultimately

responsible for sin and damnation, just as for everything else. You see what follows from that axiom "Everything has a reason." Of course, you have prudently said that everything which is its own reason for existence cannot be further resolved into a reason and a reason for that reason, etc. such as can be done for every sin and damnation. In the end, however, all these reasons resolve into that which is its own reason, i.e. self-subsistent existence, or God. This proof corresponds to the proof of God's existence.

Philosopher: I see the problem; just give me a minute to catch my breath.

Theologian: Time to begin! Have you discovered something at last, my friend? Your suddenly unfurrowed brow promises something joyful and exciting, I don't know what.

Philosopher: Please forgive my delay; it was fruitful. For if I have learned anything with certainty in today's discussion, it is that if one turns to God, or rather withdraws from the senses and leads the mind back into itself (which is really the same thing), if one tries to find the truth with sincere disposition, then the shadows are parted as if by a blast of unexpected light, and in the middle of the night, through dense fog, the way is shown.

Theologian: You sound like one who has been initiated into mysteries.

Philosopher: You will be the judge of what I have to say. I cannot deny that God is ultimately responsible for everything, and consequently is the driving force behind sin.

Theologian: If you concede that, you concede everything.

Philosopher: Not so fast! No, I say, I cannot deny it, because it is certain. Take away God, and you take away this whole chain of events; establish

Him, and you likewise establish it. This chain of events includes all the creatures which have been and will be, their good and evil actions and hence, their sins. Nevertheless, I deny that God wills those sins.

Theologian: So you propose that sins occur, not because God wills them, but because He exists.

Philosopher: You have hit the nail on the head! For although God has caused sins to happen, He is certainly not their originator. If it may be permitted to speak so scholastically, the ultimate *physical* cause of sins, as of everything, lies in God, but the *moral* cause lies in the sinner. I believe this is what was meant by those who said that the substance of the deed comes from God, but not the evil, even if they couldn't explain how the evil did not follow from the deed. More correctly, they should have said: God contributes everything to sin except the desire to sin, and consequently He does not sin. Thus, I feel that sins are not due to the divine Will, but rather to divine Reason, or to the eternal ideas of things, which are the same thing. These eternal ideas constitute the nature of everything, so one should not foolishly imagine that there are *two* basic elements of things and two gods, hateful to each other, one good, one bad.

Theologian: What you're saying is astonishing.

Philosopher: But I will make it so that you agree it's true. Here's an example which will make my point clearer and more believable. Why does three times three equal nine? Do we believe that it is because God wills it so? Or that the square root of two is an irrational number, should we conclude that God has willed it thus?

Theologian: I think not, if we are wise; for nine and three and the square root of two are numbers which can be clearly grasped; they are not just

names with no idea behind them.

Philosopher: Thus, these theorems of the nature of things, these ideas like "nine" and the "square root of two" should be ascribed to the divine Reason, where the ideas of things have rested for eternity. In other words, these theorems are true because God reasoned them from the ideas of things, not because God willed them. Moreover, these ideas follow from God's existence, for if God were nothing, everything would be simply impossible and ideas like "nine" and the "square root of two" would share the common nothingness. Thus, some things owe their existence to God's existence, but not to His Will.

Theologian: I see that, but what does this have to do with sins? I await your answer with desire and wonder.

Philosopher: You perceive that I have not digressed in vain. For just as "three times three equals nine" owes its truth to God's existence and not to His Will, so "the ratio of three to nine equals the ratio of four to twelve" also follows from His existence. Indeed, every ratio, proportion, analogy and proportionality arises not from God's Will, but from His nature, or from the Ideas of things, which are the same thing.

Theologian: And then what follows?

Philosopher: Well, if this is true for ratios and proportions, then it is also true for harmony and discord. For they consist of the ratio of unity to diversity; harmony is unity among many things and is proportional to the diversity of the things being unified. The greatest harmony brings seemingly chaotic things unexpectedly into the greatest consonance.

Theologian: Now I see what you're driving at. It is the universal harmony which causes sins, since light must be set off with shadows. However, the universal harmony stems not from God's Will, but from His Reason, or rather from the Ideas (or nature) of things. Therefore the existence of sins must be ascribed to God's reason; consequently, sins follow from God's existence and not from His Will.

Philosopher: You guessed it! For the whole chain of events would be completely changed if sins didn't exist. But the chain of events follows directly from God's existence, and cannot be otherwise. For to say that many different effects could follow from one complete and sufficient cause (as God is for the universe) is just as absurd as saying that one thing is many things. Plainly, if you add and subtract the same quantity from a number, the original number always comes out. But the chain of events is nothing but the addition and subtraction of ideas. If anyone still opposes this notion, a ready proof will overcome his stubbornness. If God is the sufficient reason for things, or rather, the self-sufficient existence and the first cause, then this chain of events follows necessarily from God's existence. Otherwise, God would not be the sufficient reason, but something other than God would have a hand in establishing this chain of events; there would be two Gods (as the Manichaeans believed) or at least God would not be the sole self-sufficient existence and first cause, both of which I hold to be false. Therefore, this chain of events follows from God's existence. Now it is well-known from the laws of logic that if the proposition "A implies B" is true, then so is the proposition, "The absence of B implies the absence of A." Therefore, since we have just proven that God's existence implies this chain of events, which includes sins, then one cannot remove the sins without removing God, which we wished to prove. So, sins and the whole chain of events follow logically from the ideas of things themselves,

or rather from God's existence: establish His existence, and these sins are established; remove the sins, and one must also remove God's existence.

Theologian: I admit the proof is adamantine, nor can it be attacked by any rational mortal, no more than the proof of God's existence. But doesn't it also follow that *everything*, good things as well as sins, can be ascribed not to His will, but to God's existence, or rather to the harmony of things, which amounts to the same thing? And doesn't it follow that sins are necessary?

Philosopher: Let me hurry to answer the first question, and the second will be dealt with more easily. Why does God will something? It certainly isn't arbitrary, since no one, least of all God, desires something for no reason, but because he thinks it beneficial somehow. God desires something because of the nature of things, which is of course contained in their own ideas, i.e. in the essence of God. But there are *two* reasons why God does something, just like everyone else: because He desires to do it and because He can do it. But God neither desires sins nor does them, since He doesn't find them good in themselves. But God finds that sins mingle in the universal harmony, since He has chosen it to be the most harmonious; their presence in the whole chain of events is compensated by greater harmony. For this reason, God tolerates, or rather allows sins, although He would eliminate them, if He could craft another, better chain of events without them. But God does *not* merely allow the whole chain of events; He desires it and even the sins that come with it, insofar as they are not seen distinctly by themselves, but as part of the whole chain of events. God delights in the whole harmonious chain of events, but not in all of its individual parts. But wouldn't God delight more in a chain of events without sin? On the contrary! He would delight less, because the delight of the universal

harmony comes from being peppered with dissonances and from the exquisite balance of its elements.

Theologian: Your argument pleases me well, for you have shown beyond doubt that God is responsible for all that exists, and yet only desires those things which are good in themselves. But please address my second question. Doesn't it follow that sins are necessary? For God's existence is necessary, and the chain of events and sins follow from His existence, or equivalently, from the ideas of things; therefore, sins are also necessary. For whatever follows from something necessary is itself necessary.

Philosopher: By the same argument, you could have inferred that everything is necessary, even that I am speaking and you are listening, since these things are also included in the chain of events. Indeed, you could have inferred even that nothing occurs by chance, except in the colloquial way used by the whole human race.

Theologian: But a Stoic might well admit that, or some other proponent of destiny and fate.

Philosopher: That should not be admitted; an abuse of language has given rise to this misconception, although it might be amended by adding an explanation. Even Christ says: "Offences will occur", i.e. they are necessary. But offences are reckoned as sins, for the passage continues, "woe to him, who brings them to pass." Thus, if offences are necessary, then this woe, i.e. damnation, is also necessary. But when speaking colloquially, one must be careful in expressing these conclusions. For a philosophical argument using everyday words like "necessary" can confuse those who don't know their technical definitions.

Theologian: But what's your reply to this question?

Philosopher: The whole trouble springs from mis-using words; sloppy terminology makes our foundations shaky and leads us into impossible labyrinths. In particular, the words “necessary”, “possible”, “impossible”, “desire”, “cause” and others have so many different meanings in every language, it’s a kind of global sophistry. I’m not just saying this to be evasive, I’ll show you plainly. Leave out all those troublesome words in this discussion (for I think that if these words had been forbidden by decree, people could still give expression to their soul without them), and as often as you need to, substitute their technical definitions. I’ll bet you anything that all the obscurities will immediately disappear; like exorcising a demon or turning on a light, every bogey-monster and spectre of difficulty will vanish into thin air. Look, this is not some trivial trick, but a wonderful method for clearing up errors, abuses and offences, a formula better than any doctor could prescribe. Urbanius Regius has written a whole book on methods for speaking wisely and diplomatically, but almost every rule is contained in this one clever rule-of-thumb.

Theologian: Come on: how can something so difficult be settled so easily?

Philosopher: Call me a prophet. There are certain words which are just vexing, annoying, irritating, aggravating and even torturing. If I were to say, “Sir, you are asserting something injurious to me, which you know is not so,” I don’t think you would be greatly offended, but would lightly overlook my presumption. But if I were to shout, “You’re a liar!”, immortal God, what a fuss you would raise, although “a liar” is just someone who asserts something false which is injurious or unjust. Thus if someone says, “Sins are necessary, God is responsible for sin, it was impossible for Judas to avoid damnation, etc.” everyone gets up in arms! However, we may say more diplomatically (but equivalently) that God is ultimately responsible for everything, i.e. He is the sufficient reason for the universe. This

sufficient reason produces the most rational universe, which is equivalent to the universe of highest beauty and harmony. Yet the most perfect harmony is that which brings the most chaotic discord unexpectedly into order, just as a beautiful painting is composed of very light and dark patches wonderfully arranged, or as beautiful music is composed of a wonderful arrangement of consonances and dissonances. This universal harmony also arranges that the true punishment for a sin is simply the logical consequence of the sin itself. Therefore, it follows that sins and their punishment result from God's existence. But to say that sins are logically necessary, or that God created or desired sin to exist, is unwise and poorly reasoned, as can be seen by anyone logical.

Theologian: You have revealed a truly marvelous insight, which resolves so many difficulties, and there seems no real reason to continue. Nevertheless, if it is possible, prove that which you did before, still using the words you find to be poorly defined and abused.

Philosopher: Were it in my power, I would make it so that people never used words for anything except that which concerned the honour of God and their own peace.

Theologian: Please try to prove it nevertheless.

Philosopher: I will attempt it, but only on the condition that whatever I say about those words which I have shown we can do without, will be thought superfluous and not binding or deceiving at all.

Theologian: I agree to this condition.

Philosopher: Ok, let me make some definitions. I call *necessary* something whose opposite involves a contradiction or cannot be conceived. For

example, it is necessary that three times three equals nine, but it is not necessary that I speak or sin. For I can imagine myself as not speaking or not sinning, but to imagine that three times three does not equal nine involves a contradiction in the definitions of three, nine and "to multiply". Everything which is not necessary is called *contingent*. This pair of opposites (necessary/contingent) is not the same as the pair (possible/impossible). *Possible* things are those things whose *non*-existence is *not* necessary; *impossible* is defined as everything which is not possible. More succinctly, "possible" describes everything which can be conceived, regardless of whether it's necessary or contingent. The two pairs of definitions are related: something is necessary if its opposite is impossible, whereas something is contingent if its opposite is possible. To *desire* something is to delight in its existence. To *abhor* something is to suffer from its existence or to delight in its non-existence. To *tolerate* something is to be aware of something and yet neither desire nor abhor it. To *instigate* something means that one's desire was the cause of its cause. Given these definitions, I dare to claim that not a single one of their consequences will wrest any honour from divine justice, even by torture.

Theologian: So how do you reply to the argument we cited above, that the existence of God is necessary and is the cause of the chain of events, and thus of sins as well. Therefore, sins are necessary, since the logical consequences of something necessary is also necessary.

Philosopher: Actually, it is not true that whatever follows from something necessary is also necessary in itself. For something contingent, i.e. something whose opposite is conceivable, can also follow from something necessary, just as particulars can follow from purely universal truths. But let me finish this proof with the definition of necessity. Something is necessary if its opposite is self-contradictory or cannot be conceived. Thus, the

necessity of something is determined by its definition, *not* by its cause. In other words, something is necessary only by virtue of itself, by containing within itself its own reason for existence and for its truth, like the truths of geometry. Yet of all existing things, only God is necessary; everything else is contingent, although they follow from the existence of God, or rather from the established chain of events. These things are, so to speak, only "accidentally" necessary, although nothing happens by chance; Providence has established this chain of events and everything which exists is determined. Likewise, something can be possible, even if it doesn't exist and never will, e.g. the unicorn. By our definition, anything which can be conceived is possible, even if it goes against existing things, the universal harmony or the existence of God, which would preclude its existence. In such cases, it is "accidentally" impossible, but not impossible in itself. Therefore, it is a big mistake to call absolutely impossible that which has neither been, nor is, nor ever will be.

Theologian: But isn't that true? Won't everything which will be, be absolutely necessary, just as whatever was, was necessary and whatever is, is necessary?

Philosopher: No, that's completely wrong, unless we add a qualification to these statements, which people generally omit. The correct version is "Everything which is, is necessary, *if it exists*." In other words, the existence of something is necessary only if we postulate its existence; then its non-existence leads to a contradiction, as required by the definition of "necessary". However if the postulating qualifier "if it exists" is left out, the statement is false, because anything which now exists can be imagined *not* to exist. Similarly, it can be imagined that anything which did happen, actually did *not* happen. This is the province of fine poets, who invent false stories, but nonetheless plausible ones. For example, Medea is a possible

person, i.e. she can be imagined clearly and distinctly, but it certain that she never lived, and to my mind, will never live, unless one is of the heresy that every possibility will eventually come to pass in the infinite time remaining, so that every fairy-tale that can be dreamed will one day occur. Even if we were to grant that, the fact remains that Medea is possible, even though she has never existed. Those who think otherwise necessarily remove the division between possibility and truth, between necessary and contingent things; and by distorting the meanings of words, they run counter to the everyday usage of those words. Therefore, sins, damnations and other contingent things of this chain of events are not necessary, although they follow from something necessary, namely the existence of God and the harmony of things. Thus, even things which never have been and never will be and even things which are inconsistent with the universal harmony, all these things are possible, in that they can be imagined. Thus, it was possible for Judas to be saved, since it can be imagined without self-contradiction, although this chain of events (and thus the universal harmony) determined that his salvation would never come.

Theologian: Yet this usage has crept up on all peoples and into their languages and has grown strong by the general ambiguity, so that everything which actually exists, or has existed or will exist is called necessary, while everything which does not, has not and never will exist, are called impossible.

Philosopher: But as I have shown, this is due to the omission of the qualifying phrase, which sounds like a repetition, to which everyone is prone, since saying the same thing twice is boring.

Theologian: Perhaps we ought to seek the true reason and solution to a lazy sophism, which has spread over all the Earth. For a long time now, Islamic

philosophers have proposed something of great value to rulers facing the danger of war or pestilence: that resistance is futile, nothing can be done to help, since fate cannot be avoided. Things denied by heaven cannot be won by striving, and things granted by heaven can be gotten by the idle.

Philosopher: What you say is true. For this argument, so dreadful and firmly implanted in some spirits, is a mere sophism, which relies on leaving out the hypothetical nature of the cause and of what exists. It is true that everything which will be, will truly be, but it is not necessary, not logically necessary, nor is what you do or not do. For an effect is not necessary unless the cause is postulated.

Theologian: I usually rebuke those who are so dangerously delusional with these words: You moron, if Fate has decreed that you cannot avoid evil, perhaps your stupidity is fated, too, so that you're not careful enough to avoid it! No one's destiny is worked without a means, be it diligence or opportunities. One must trust in this alone, and take advantage of opportunities as they occur. But you ask, isn't whatever God foresees certain? Whatever will be, will be. I admit that is so, but it requires a means and for the most part, it only occurs with your actions. For good fortune rarely heaps itself on a sleeper and laws are written for the watchful. Therefore, since you are unsure whether to believe in your free will or not, act as though you did, i.e. act as if nothing were decreed by fate, although you cannot really act on something completely unknown. Thus, if you carry out your task, whatever may happen by fate, or rather the harmony of things, will not be held against you by God. The whole debate over foresight, Fate, predestination and death doesn't help in leading a life. Everything ought to be done in the same way, as if w didn't think about these matters. If someone loves God constantly, then by that deed, he shows himself to have been predestined for salvation. Therefore, we can be saved

if we desire it (and what more can we ask?) although it is by grace that we desire it.

Philosopher: How very true! If only our debating scholars could be persuaded!

Theologian: The question remains whether God desires sins or not. At first glance, it seems that God does not abhor sin. God is not grieved by anything which exists, for He cannot be grieved whatsoever. So the existence of sins does not grieve God, either. But he who is not grieved by something cannot abhor it. Therefore, God only abhors that which doesn't exist; its non-existence is pleasing to God. These conclusions follow from your own definitions.

Philosopher: You have reached the right conclusion. As long as these sins are not considered by themselves, God does not abhor them. God tolerates sins which the universal harmony brings to pass, i.e. He neither desires them nor abhors them.

Theologian: I beg your pardon, but it seems that God does desire those sins. For the universal harmony is pleasing to God, and those sins are part and parcel of the universal harmony. And by your definition, we desire something if we are delighted by its existence. Therefore, God desires those sins.

Philosopher: This line of reasoning is deceptive. Even if the whole harmony is pleasing, that doesn't mean that all of its parts are pleasing, too. It is not as though every part must be pleasing if the whole is to be pleasing. For example, good music contains dissonances which may be jarring by themselves, but which are blended with consonances to create a beautiful whole. The dissonances serve to create balance; the harmony tolerates these

dissonances. But only the whole is pleasing; only the whole is harmonious. Likewise, the happiness of the saved delights God, while the happiness lacking in the damned does not grieve Him, since He is not grieved by anything. The sorrow is erased by the balance of the universal harmony.

Theologian: You have indeed laid the greatest difficulty to rest, which is more than I hoped. You have shown (which hardly anyone has shown, to this day) that is reasonable to say that God neither desires nor abhors the sins which occur, but rather tolerates them.

Philosopher: So you have no objections?

Theologian: I can already see what you're going to say about God being the instigator of sins.

Philosopher: Namely, that it is not God who desires sins, but rather the sinners and the devil; they alone delight in the sin itself.

Theologian: Exactly: those who delight in the sin are its true instigators. For otherwise, it could be argued that people or the devil merely tolerate sins as well. It cannot be said of someone who commits a mortal sin that he was only doing what he had to and that he injured others out of necessity. Rather, it must be said that he hates God, i.e. the universal good and therefore delights in sin and contrariness. But what of someone who commits a venial sin out of ignorance, not out of malevolence? Shouldn't we say that he merely tolerates his sin?

Philosopher: We may not even say this. By its definition, "to tolerate" is to neither desire nor abhor. But this definition also requires that one be aware of the sin, which is not the case for this sinner. He desires that which makes up the sin, i.e. the deed; but he neither desires the sin itself nor tolerates it,

since he is ignorant of it. God tolerates sins because He knows that those things which He permits are not contrary to the common good, but that this dissonance is compensated in another way. Someone who commits a mortal sin knows that what he is doing is contrary to the common good, as far as he can judge, which cannot be reconciled except by his punishment. He hates this, and yet he desires the deed. He must hate the common good or God's rule of the world, and insofar as he hates these, he sins mortally.

Theologian: You have completely satisfied me, and excellently acquitted God of desiring sins. Let me summarize your argument. We commit sins because we are able to and because we want to. Our ability to sin stems not only from what we were born with, but also from things we have picked up. Since the former come from our parents, and the latter from our environment, our ability to sin is caused by external things. Likewise, our desire to sin is caused by our beliefs about the sin, which in turn results from our perception of the sin, which itself derives from the sin itself. So both our ability and desire to sin are caused by external things, i.e. by the present state of things. But the present state of things was caused by the preceding state, which was caused by the one preceding that, and so on. So the present state of things is the result of the chain of events, which comes from the universal harmony, which in turn is the consequence of eternal and unchanging ideas. These ideas are contained in God's mind and stem from themselves, not from God's will; God did not conceive these ideas because He desired them, but because He exists. Therefore, although sins are not pleasing in themselves, sins are tolerated by God's will because of the universal harmony which could not be established without them.

Philosopher: So what do you still object to?

Theologian: Actually, quite a bit; we certainly haven't resolved all the difficulties. For what does it matter if we reconcile sins with divine goodness, if sins cannot be reconciled with our freedom? What good does it do to acquit God, if the guilty are acquitted with Him? How do we profit, if in releasing the divine will, we render every will powerless? For I ask you, what is human freedom, if everything we are is the result of external things, if all our desires are determined by them, if a predestined logical sequence rules over our thoughts, the mere by-product of interacting atoms?

Philosopher: Please don't get worked up over an idea which is widely misunderstood and poorly expressed. We agreed before, as you yourself proposed, that everything had a sufficient reason; so of course, every act of desiring something also has its sufficient reason. This sufficient reason must either be external to the act itself, or it must lie in the act itself; however, in the latter case, that would make the act of desiring a self-sufficient existence, which is only true of God. Therefore, the sufficient reason for desiring something is external. To discover what the sufficient reason is, we must consider what "to desire" is. What does it mean to desire something?

Theologian: To delight in its existence, as you prudently defined it before, whether we think it exists or whether we just imagine its existence.

Philosopher: But to delight is to experience harmony, as we said before; therefore, everything we desire seems harmonious somehow. But whether something appears harmonious depends on the nature of the perceiver, the object and the medium between them. So although we can *do* whatever we desire, our desires are not arbitrary; we only desire things which we believe to be good or pleasing. But our beliefs are not arbitrary, either; no one has ever managed to make himself disbelieve something he knows to be true, no matter how much he wished otherwise. Therefore, since beliefs do not

result from desires, neither do desires result from desires. And even if we could make ourselves wish something merely because we wanted to, what causes our desire to wish it? Is it because of yet another desire, and so on to an infinite series of desires; or is it completely random, i.e. for no reason at all?

Theologian: I cannot answer your reasoning, but I don't see you answering my objection that our free will is lost, either.

Philosopher: I admit it, if you define free will the way some people do: that it is the ability to act or not act, given everything necessary, both externally and internally, for the deed.

Theologian: Is that definition wrong?

Philosopher: In a word, yes — if no explanation is given. Saying that something (in this case, an action) does not exist while all of its requirements exist is like saying that a word can still be undefined even after its definition has been given, or even like saying that something exists and does not exist. If something does not exist, one of its requirements must be missing, because everything is determined by all of the requirements for its existence.

Theologian: Then the correct definition is: Free will is the ability to act or not to act, given all the *external* things necessary for the deed.

Philosopher: In other words, by this definition, I can forego an action if I do not desire it, even if everything external is conducive to it. Nothing is more true, or in more perfect agreement with my philosophy. Even Aristotle defines an action to be "spontaneous", when its cause lies within the agent, and to be "free", when it is spontaneous by choice. Thus, the more

spontaneous someone is, the more his actions flow from his nature, and the less he is influenced by external things. In the same way, a person is more free, the more capable of choice he is, i.e. the more he perceives things with a clear and quiet mind. Spontaneity comes from one's ability, whereas freedom comes from knowledge. But given that we have a good opinion of something, we cannot help but desire it; likewise, we cannot help but do something, if we desire it and recognize the opportunity. Nothing is more strange than to mutate the idea of free will into the incredible, even absurd, ability to act for no reason whatsoever. The privilege of free will consists of standing at the crossroads of life and only doing what we desire; and we can only desire what we consider good. But since we can find out what is good for us by using our reason, we shouldn't find fault with Nature, that she should've given us a weird ability of a certain "rational irrationality".

Theologian: But there are some who claim they have such freedom, that they can do something or not, knowingly and with forethought, but for no reason whatsoever.

Philosopher: I say this is just a matter of deceive or be deceived. These people don't like to think that their desires result from external things; and the pleasure they get from defying that idea motivates them. But their desires do not derive from themselves.

Theologian: But suppose that I were about to make a hand gesture; can't I move it this way or that?

Philosopher: You can move your hand however you want.

Theologian: So why do I move it to the right, and not to the left, as you see?

Philosopher: Subtle reasons are undoubtedly at the bottom of it. Perhaps it came to your head first, because you saw it first. Perhaps your hand is accustomed to that direction, or perhaps the movement is more troublesome in the other direction. Such an act results from all sorts of little circumstances, so many that no one could ever write them all down.

Theologian: But if you, or an angel, or even God were to predict in which direction I were to move it, then I would move it in the opposite direction and assert my freedom, though the prophet were unwilling.

Philosopher: But you wouldn't be more free because of that, for now the pleasure of contradiction has caused your desire. You see, if you always do the opposite of what's predicted, an infallible prophet could predict that as well, as long as he never told you beforehand. He could either foresee it silently, or tell it to a third party without your knowledge.

Theologian: So he can't tell me the truth beforehand? But why not, if he has foreseen the truth: for everyone who knows something true can tell it to every listener. But I will do the opposite of whatever he says; therefore, he does not foresee what I will do, which is contrary to the hypothesis. So either foresight or free will must be eliminated.

Philosopher: This argument is subtle insofar as it concludes that if a certain mind always does the opposite of what is predicted of it, no matter by whom, then such a mind contradicts the existence of an all-knowing being, or rather, the harmony of things. Therefore, such a mind has never existed, does not exist and will not exist.

Theologian: But what do you have to say about the well-known verse: "I see what is good, and I approve it, but still I choose to do the more evil."

Philosopher: This verse is absurd given our definitions, so it should be interpreted. Medea, who says these words according to Ovid, means to say that she sees the injustice of butchering her own children, but nevertheless, the pleasure of revenge on their father prevails over the horror of the crime, just as a greater good may prevail over evil. In other words, Medea sins against her conscience. “Good” and “evil” in this verse stand for “just” and “shameful”; no one should conclude from this verse that anyone ever deliberately chooses that which he considers altogether worse. Whoever thinks the opposite overturns all ethical principles and can’t even say what “to desire” means.

Theologian: You have just about convinced me.

Philosopher: We human beings are so stupid; we ask for self-contradictory chimeras, despising the privileges of nature and God, not contenting ourselves with the use of our reason, the true root of all freedom. Unless we’re given the power of unreasonableness, we never consider ourselves free enough! As if it were not the highest freedom to use our reason and desires as best as possible, with circumstances causing our reason to recognize truly good things, and our reason causing our desires to reach for them. Then truths would not be resisted; by their reason, people would see things as they are. For if passions are absent, it is just as impossible for us to knowingly make a mistake or willfully commit a sin, as it would be for a person with healthy eyes to not see an elephant. Certainly God’s freedom is the greatest, although even He cannot make a mistake in choosing the best; the freedom of angels is next best, provided that they don’t fall. In short, freedom comes from using one’s reason; in this chain of events, we either walk like kings along the path of our responsibilities, or we stagger along untrodden paths, according to whether our reason is clear or cloudy.

Theologian: Thus, every sin follows from an error.

Philosopher: Granted.

Theologian: Then all sins ought to be forgiven.

Philosopher: Not in the least, for just as in the middle of dark room, light may leak in through a crack, we have the power to evade sin, if we only desire to use it.

Theologian: But why do some desire to use it, and others not?

Philosopher: Because it doesn't occur to them that they could profit by it. Or rather, such people seem to lack thoughtfulness and attention, for they see, but do not observe; they hear but do not listen. This brings the refusal of grace, or as the holy scriptures say, the beginnings of a hardened heart. Everyone among us has heard a thousand times, "Tell me why you are doing this!" or "Consider the outcome!" or else "Think about your actions!" And yet, if only one of these thoughts were properly understood and always borne in mind, everyone would be immediately changed, becoming infallible, wise and happy. When fully appreciated, such thoughts have more power than all the paradoxes of the Stoics' wise man.

Theologian: So, in the end, oughtn't all evil people be considered unfortunate, since they don't perceive the way to their own happiness, which is (apparently) so easy and straightforward?

Philosopher: Truly.

Theologian: And oughtn't they be pitied as well?

Philosopher: Undeniably.

Theologian: And isn't their misfortune responsible for their evil?

Philosopher: It is clear that their own desire isn't responsible for what they desire. As we just proved, the chain of events — or rather, the universal harmony — is responsible for their desires, as for everything else.

Theologian: So aren't they like insane people?

Philosopher: That is almost true, but not quite. For like drunken or sleeping people, insane people cannot ask themselves "Why am I doing this?" (in which all wisdom is contained). Even if it did occur to them, they could never keep it in their heads. But stupid, mistaken and malicious people use their wits, albeit not towards the highest goal. Insane people are confused by a sickness which infects their nerves and spirits. But stupid and malicious people are motivated by a different rationale, one which warps reason and makes the better seem worse, a rationale which is inculcated by temperment, education and habit. Angels surely regard evil people just as dumb as we consider retarded people.

Theologian: At least they are like those born on the fourth day after a new moon, or who were poorly educated, seduced by bad company, ruined by sex or made savage by adversity. They cannot deny that they are wicked, but they have reason to blame fortune and other people.

Philosopher: That's generally so; or rather, it must be. For no one makes himself evil by choice; otherwise, he'd be already evil.

Theologian: But now we need spirit and a strong heart, for we have reached the greatest difficulty without even realizing it. If your luck holds even here, you will be triumphant. Here is the problem, one which we can't avoid. There seems to be some justice to the claims of the damned, that they could

not help but sin, given the way they were born, the way they were brought up, and the times and people and opportunities they happened upon. They cry that corrupting thoughts engaged their minds too early, that circumstances nurtured evil and goaded them to sin; or that the circumstances which would've freed them and held them back from sin were lacking, as though Fate had conspired to destroy them. Certain helpful warnings can awaken us if we grasp them correctly, like "Why are you doing this?" or "Consider the consequences!" But if the damned heard such warnings, they still lacked the needed thoughtfulness and attention, the wisdom which is the greatest gift of grace. How unfair it is that, although all people sleep, only a few are awakened and others are left to be destroyed! Even if it were necessary that so many creatures should be lost, that the chain of events could not be otherwise, at least one should let off the unfortunate sinners.

Philosopher: Well, the situation is the same regardless of whether things happen by chance, by deadly Fate or by the universal harmony.

Theologian: Please don't interrupt until I'm finished. How cruel it is for someone to look unfeelingly upon the suffering which he created! It is like a bad father who has children and gives them the worst education, and then punishes them, although he ought to be punished himself. The damned curse the nature of things, since it causes other beings to prosper from their damnation; the damned curse God, since He rejoices at their expense; and they curse themselves, because they know that they can never find oblivion. They curse the universal chain of events, which entangled them in sin. Lastly, they curse the eternal and unchangeable ideas which determine the universal harmony, and with it, their existence and their sins. They curse these ideas, because they brought forth a universe which uses their misery to set off the happiness of others.

Philosopher: The complaint is tragic enough, but not equally just. I'll prove this to you not only with sure signs, but also with solid reasoning, provided God (whom this debate concerns) gives me strength and spirit. This complaint is truly empty, even if you appraise it knowing that it only one of the damned could make it. It should be noted that this complaint cannot be made by someone not yet damned but damnable, i.e. one who might be damned in the future. Imagine to yourself a damnable person, and place before his eyes and soul the horrors and depths of hell, point out his little corner which will be his for all eternity, destined for his torments, if he acts damnably. Can anyone living see all this and afterwards complain about the causes of his damnation, and God and the nature of things?

Theologian: Well, at least he won't be able to then, because one could immediately reply that he could yet save himself, if he only wanted to.

Philosopher: That's exactly what I wanted to hear! Let's assume that, despite his foreknowledge of hell, this person continues on his way and is accordingly damned. Will he be able to repeat his complaints with any justice whatsoever? Will he be able to impute his misery to anything except his own desire?

Theologian: You've overwhelmed me more than persuaded me.

Philosopher: I will make it so that you will be persuaded as well, once you have clearly understood my argument.

Theologian: I concede that this sinner will impute his sins to his own desires, but he will also impute those desires to fortune, i.e. God, or at least, as you like to say, to the nature of things.

Philosopher: I've told you already that the opposite implies a contradiction; no one willingly makes himself evil, else he were already evil. No one is the ultimate cause of their own desires, for whatever one desires to desire, one desires already, just as having the ability to do something also involves having the ability of having the ability, as our legal textbooks put it. But if this excuse is accepted, then punishment ought to be eliminated from the nature of things: no one is evil, no one ought to be punished, for everyone has this excuse.

Theologian: So, what now?

Philosopher: Well, in judicial matters, the only requirement for inflicting punishment is the determination that the criminal acted with a deliberate, malicious will. Yet those who fault the divine justice seem to be demanding more for punishment than the determination of the sinner's desire, which seems ridiculous.

Theologian: You have convinced me that not the least shadow of an excuse is left for sinners. They have nothing to find fault with, but they still have reason to be indignant. Or rather, they have cause to complain, but nothing to complain about, like a dog angered by a stone, or an inept gambler at his bad luck, or a desperate man against himself. These seem like good models of the anger of the damned against the universal harmony, the nature of things, the eternal ideas which brought about this particular chain of events. It is truly a stupid anger, like one who makes an adding mistake and who discovers upon checking his work that it doesn't agree, and then flies into a rage against arithmetic and not against himself, regretting that three times three actually equals nine instead of ten. But the universal harmony arises from such fundamental, unchangeable ideas like three and nine. Thus, such people have an anger with no object, suffering from which they cannot

escape, and a complaint that they can neither get rid of nor make acceptable to themselves. Truly, these are enormous additions to the raging wretchedness with which damnation is mainly seasoned.

Philosopher: Excellent! Their suffering has no escape, which is, if one may express it so, perversely almost pleasing to them, although they cannot make their complaints acceptable to themselves. This was the conclusion with which I wanted to convince you. However, I add that no one is ever actually damned from all eternity; rather they are always damnable; they are always able to be freed, but they never desire it. Therefore, since their own conscience protested in their sins, they are contradictory if they fault with the nature of things.

Theologian: Now you are talking in riddles.

Philosopher: Or in paradoxes, as some might say.

Theologian: It doesn't matter which — we're alone, put your cards on the table.

Philosopher: If you had been observant, you would've noticed that I have already put them on the table. You remember how a little while ago, we talked about the nature of a mortal sin and about the reason for damnation.

Theologian: Please remind me and show how it applies here.

Philosopher: You don't remember what I replied when you asked for the reason of Judas' damnation? Those enlightening words bear repeating. You asked me, "What was the reason for his damnation?" to which I replied, "The reason was the condition of the dying man, namely the burning hatred of God in which he died." For since the soul is not open to new, external

sensations after death (when the body is returned) the soul sticks to its last thoughts. These do not change, but are intensified in death. But hating God, Who is the happiest being, leads to the greatest pain, since hatred means to suffer pain because of the hated one's happiness, just as love means to rejoice in the beloved's happiness. Since God's happiness is the greatest of all, so is Judas' pain; and the greatest pain is damnation. Therefore, a dying person who hates God, damns himself by his own hatred. I think this is pretty close to a proof, for it renders the magnitude of the wretchedness equal to the magnitude of the hatred, which in turn equals the magnitude of the thing hated.

Theologian: But now you have broadened the scope of your argument: for now you're saying that evil people are never damned, but are always damnable.

Philosopher: I understand that to mean that whatever changes cannot stay the same. So also evil people are never damned, for they can stop being damnable whenever they desire it. In other words, they damn themselves from moment to moment.

Theologian: I'd like to see *that* proved.

Philosopher: It's pretty easy! The hatred of God is what damns someone; thus, by continuing or intensifying his hatred, he continues or intensifies his own damnation. Likewise, the blessed, once they have been accepted into God, i.e. the highest reason, and have perceived the universal harmony all at once, may still increase their joy by reflecting more precisely on the elements of their joy; for thought and desire would come to a standstill without constant novelty and progression. So it is also with the damned, the furious haters of the nature of things: the more they learn of the nature of

things, the more enraged they become with new indignation, hatred, envy and in a word, with insanity.

Theologian: You illustrate your hypotheses clearly, but let me ask you two questions.

Philosopher: Ask me a hundred if you wish.

Theologian: One of the questions is merely incidental, but the other is fundamental. You say that happiness, like unhappiness, grows continuously. But I don't understand how the vision of the divine Essence can grow. For if it is the Essence, then it is exactly that and unchanging, and hence cannot grow.

Philosopher: Even a complete conception can grow, not by adding to it, but by reflecting on it more deeply. For example, if you can grasp nine ones, you have grasped the essence of "nine" exactly. But that does not include all of its properties. That is, you can understand nine without realizing that it is three times three, or four plus five, and an infinity of other combinations. This analogy with nine is perhaps not apt, since it introduces other numbers, whereas God has nothing outside Himself with which He could be compared. A better example might be the circle, which is something finite with an infinity of properties within itself. For example, if you know that all lines from the center to the circumference have an equal length, then I'd say you had grasped the essence of the circle. But you have not exhausted all the properties of the circle. For example, there is an infinity of regular figures which can be drawn within the circle, which are fertile ground for new geometrical theorems.

Theologian: I must admit, I have often wondered what kind of pleasure lies in the blessed Vision, where the mind is astounded and forever maintains

one unmoving gaze. Happily you have taken away the clouds and reconciled completeness with continual novelty. But this question was only incidental. The question I really wanted to ask was: where does this division of spirits come from? Why do some burn in love for God, while others are driven towards a hatred deadly to themselves? Where do they part ways, and what is, so to speak, the root of the divergence? For we often believe the damnable to be so similar to the savable that we confuse them.

Philosopher: What you ask of me is great, my friend, and even Philosophy itself might not be equal to the task.

Theologian: But try it anyway. For reason may progress as long as it provides itself with support. After all, up to this point in our whole discussion, you have not touched Revelation with profane hands, since you haven't been initiated yet.

Philosopher: I have meditated much on this subject, with the following results. You must realize that there are two kinds of people in the world, just as there are in every nation: those who are satisfied with the present situation and those who hate it. Now the contented and neutral people go to work every day, seek to profit, to gather and increase their fortunes, friends, power, pleasures and fame; otherwise, they would be numb rather than satisfied. However, if their success is prevented by the laws of the state, they don't transfer their hatred to those laws nor do they suddenly desire to change things. Rather, they make new plans with a tranquil mind, no more upset than if they had missed a fly they had tried to swat. This frame of mind distinguishes good citizens from the bad ones, and is even more appropriate when discussing the universal state, whose governor is God.

Theologian: That's certainly so, for even in the ideal state, whose fulfillment is beyond the dreams of men, one cannot prevent that its laws

will occasionally limit the success of some of its citizens, or even bring misfortune on them. It is just for them to contemplate change, since it is necessary for them. But in the universal state, whose ruler is God, the only miserable ones are those who want to be.

Philosopher: Therefore, in this world, no indignation at *past* offences is ever just; every disposition of the mind towards the past except tranquillity is in some way criminal. Thus, to want to suffer when you are denied something is a sin and a kind of hidden anger towards God and towards the present state of things, which depends on the chain of events and the universal harmony.

Theologian: But it's impossible not to be disappointed, when something is denied you.

Philosopher: Predilections of the mind are similar to urges of the body. But there are two types of urges: those which overcome all resistance and those which can be opposed by other drives. If you want to go from east to west, but also wants just as badly to go from west to east, then you will simply stand still. The first desire is not eliminated, but is neutralized by the opposing second drive. Thus, he whose desire has been frustrated cannot help feeling upset for a moment, but if he is satisfied with the overall direction of the world, he won't persevere in his suffering. For he will recognize that everything is for the best, not only overall but also for him specifically; so everything turns to good for those who love God. Likewise one can assume that everyone hates God who are not pleased with His governing of the world, to whom it seems that God could've improved things, including those who argue for atheism from the disorder of the things. Thus, it seems that even atheists hate God; for whatever they may

say or believe, if they are upset by the present state of things, they hate God by that very fact, even if they don't call what they hate "God".

Theologian: If this is our philosophy, then it is not lawful to work to improve things.

Philosopher: Wrong indeed! It is not only lawful and just, but also necessary; otherwise, we would lapse into the fatalism we discussed above. Everyone who loves God, i.e. the universal harmony, ought to be contented with the *past*; since it cannot be undone, it was desired by God and was therefore for the best. But as for the *future*, nothing has been decided as far as we're concerned, so there is still a place for conscience, industry and deliberation. When a lover of God is considering eliminating or correcting some evil situation, whether his own or another's, whether public or private, his plans focus on correcting it in the future, not the past, say tomorrow. Tomorrow may pass without his plans succeeding, but this failure will not blunt or quench his desire for change. It is not for us to set deadlines for God; only those who persevere will be crowned with victory. In short, a lover of God should always consider the past good, but still strive to improve the future. Whoever is so disposed will achieve finally a tranquillity of the mind (which serious philosophers urge) and a complete surrender to God (which mystical theologians urge). Whoever thinks differently neither knows God (not recognizing that He is responsible for everything) nor loves Him, even if he uses the words like "faith", "love", "neighbour" and "God". Moreover, no one ignorant of God can really love Him, although he can hate God nonetheless, by hating the nature of the world and the chain of events, since he who wishes to change these also wishes that God were different. Those who die dissatisfied, die hating God. The newly dead soul rushes headlong in the direction he began with after death, since nothing external holds him back; his senses are closed. He

feeds his own soul with what he has within, with his own hatred of things, and with his own misery, disgust, indignation, envy, dissatisfaction, all of which ever increases. Then even were he reunited with his body, he would find new grounds for contempt, disapproval and anger. Indeed, the less he could check the rushing torrent of events displeasing him, the more he would be tormented. But such suffering almost becomes a perverse pleasure; the wretched almost delight to find that they are tormented. Even among the living, the unhappy slander the blessed whom they envy, for no other reason than to be indignant that such inept people (in their opinion) should possess so many good things. But thus they make their own torments more abundant and their pain more wild; they also distort their envy to make it seem more reasonable. Somehow, in a remarkable way, envy, indignation and dissatisfaction of this kind are bound up with the pleasure of suffering. For since they are pleased to think of themselves as wise, they suffer all the more keenly that they lack the power which they feel is their due; and what power they have, they feel is beneath their dignity. So there you have an explanation for an amazing paradox. I maintain, not only is no one damned unless they desire it, but also that no one *remains* damned unless they desire it. For no one is damned unless they damn themselves; the damned are never wholly damned, but always remain damnable. They are damned by such a stubbornness and perversion of their desires, such a turning away from God, that their greatest delight is in having something which makes them suffer. They are always looking for a reason to become angry. They seem to have the madness of fury, but which is desired, despairing, uncurable and eternal. Therefore, the damned neither could nor would make the complaints which we ascribed to them before, i.e. that they would accuse nature, the universal harmony and God of being co-conspirators in creating their misery.

Theologian: Immortal God! You have turned this paradox into a job well done! I can tell that this sort of explanation is consistent with the Holy Fathers. I know of a simple, but wise fable, which nearly encompasses the intrinsic character of the damned. Once upon a time, there was a hermit, I'm not sure which one, who was almost intoxicated with profound contemplation. And one day, this hermit began to suffer gravely because so many creatures had to be damned. He approached God with his request, and demonstrating his sincerity, he asked, "O Father, how can You contemplate the destruction of so many of Your children with no sorrow? Oh, receive those miserable demons back into grace, those demons who drag so many souls down into the lower world with themselves." Then the heavens and the tempests were calmed, and the Almighty One answered serenely, "My son, I see the simplicity of your heart; I understand well the exuberance of your good will, and I would gladly do it. I will forgive everyone who asks for forgiveness." Then the adoring hermit said, "May You be blessed, Father of all mercy, inexhaustible Fountain of grace! And now, with Your permission, I will pay a visit to Old Nick and those other wretched ones, and tell them of this happy day." The hermit went to the Prince of Devils, with whom he was well acquainted, interrupted him in the middle of a conversation, and said, "Boy, this is your lucky day! The doors of salvation have been thrown open to welcome you, the doors which have been closed since almost the beginning of the world! Now try to complain about the cruelty of God, Who was moved by the entreaty of a poor hermit, where the rebellions of so many ages failed!" But the Demon-Prince, outraged and menacing, said, "Excuse me, who made you our attorney? Who suckered you into believing in such stupid mercy? Listen, you moron, we don't need your intercession or God's pardon."

Hermit: What stubborn blindness! Please stop and let me speak to you.

Beelzebub: You're obviously trying to lecture me.

Hermit: How much will it cost you to listen for a few minutes to a small man who just wants the best for everyone?

Beelzebub: So what do you want?

Hermit: Listen, I have been dealing with God for your salvation.

Beelzebub: You?? With God?? O shame of the heavens, infamy of the world, indignation of the universe! He Who rules over everything! How can He ask that His angels tremble before an Authority which has bowed before the worms of the earth? I'm about to explode with fury.

Hermit: Oh, refrain from these curses on the threshold of reconciliation.

Beelzebub: I am beside myself.

Hermit: You will return to yourself, when you realize with what fatherly tenderness the heart of God awaits the return of a son.

Beelzebub: Is it really possible that He Who has provoked us so often really wants reconciliation? That He Who has injured us so often has reconsidered? That He Who likes to be thought of as omniscient admits His mistake? That He Who likes to be thought of as omnipotent abjects Himself?

Hey, you! How much is this "peace" going to cost?

Hermit: A single entreaty will extinguish the anger, bury the hatred, and drown the memory of the past itself in the deep.

Beelzebub: Announce that I am ready to be friends on this condition.

Hermit: Seriously?

Beelzebub: Don't doubt it!

Hermit: Don't delude me!

Beelzebub: So go and close the deal...

Hermit: Oh, I am so happy! What a beautiful day! O you who taste freedom, O you blessed God!

God: Why all this dancing?

Hermit: The bargain has been struck, O Father! Now may our God and His Anointed have rule, and power, and salvation, and strength, and honour and glory! For the devil who used to accuse us daily and clamour day and night for our ruin has been converted.

God: Did you mention the requirement of the entreaty?

Hermit: He agreed to it.

God: Watch out that you're not being deceived!

Hermit: I'll bring him here to fulfill it.

God: Wait, before you go, let's establish the wording of the entreaty.

Hermit: I'll write it down.

God: Tell all those who wish to be received into grace, that they should appear before My throne and say the following words: "I admit with my mouth and acknowledge in my heart that my own malice has caused my

unhappiness, which would have continued eternally, had not You shattered my stupidity with Your ineffable mercy. Now that my peaceful mind can tell the difference between light and darkness, I would rather endure the worst than return to my former state by repeating my offence, for nothing would be so foul in all nature."

Hermit: I've written it down, and now I will go, or rather I will fly...

Beelzebub: You think you got wings or something?

Hermit: My mood makes me swift. Here are the words of the entreaty.

Beelzebub: I like what I'm reading. But when will the entreaty be made?

Hermit: Whenever you want.

Beelzebub: As if I were the cause of the delay!

Hermit: So let's get going to the throne of God!

Beelzebub: Are you crazy, or what? Shouldn't He be coming to me, and not the other way around?

Hermit: This is no time for joking!

Beelzebub: He who is making the entreaty should be going.

Hermit: So let's go!

Beelzebub: You're nuts!

Hermit: Aren't you going to make the entreaty?

Beelzebub: Did you promise that, or something?

Hermit: Who would dream of anything else?

Beelzebub: I, the injured party? I should entreat that Tyrant? What a cute intercession this is! Oh, the pestilence of human beings! What a perfect example of a traitorous attorney!

Hermit: Oh, what are you doing?

Beelzebub: Poison enters all my limbs, and
Every fury rages through my veins!
Crimes accumulate on crime's head:
That's how we're atoned for.
The only sacrifice for one who rages
Is the sacrificial slaughter of his enemy.
I delight in ripping him alive into pieces,
Shredding him into a thousand parts and
Scattering them to the winds, to make
Him truly feel my suffering,
To peel away his flesh, even when the
Trumpets themselves call the resurrected.

Hermit: God save me!

Beelzebub: The dark jaws of Avernus, and you lakes of Taenarum —

Hermit: He is gone, I can breathe again. With his last words, the wretched one said where he was going. O devil despaired of! O enemy of God, of the universe, of yourself! May your curses depart and keep their deliberate insanity to themselves. But praise, honour and glory to You, my God, that You have deigned to reveal radiantly Your mercy and justice to Your servant, and that You have removed all shadows of doubt that tried to

portray You as unjust or powerless. Now my soul is quiet, and with inexhaustible delight, suns itself in the light of Your beauty.

Theologian: Our hermit said these things and I agree with him.

Philosopher: With this delightful little story, you have brightened the severity of our argument, or rather, signed and sealed it with an epilogue. Now I think we can safely quit.

Theologian: Let me ask one more question. I acknowledge that you have proven that the damned cannot complain about God, the world or anything else, and that they don't even want to be able. But it is still apparent that God is doing a favour to the minds which are amazed by His unfathomable judgment, and even to Himself. I could probably figure this out for myself from everything we've established, but I'd prefer to have you summarize it.

Philosopher: So what's left to complain about? If the chain of events were not so, neither God nor a blessed soul could be blessed, or even exist, since the chain of events follows from God's existence.

Theologian: I admit, no one can complain, but many might wonder about two things: first, why the system of the world was set up with damnations, and secondly, why one soul makes itself, even *chooses* to make itself more unhappy than another.

Philosopher: The first question is the easiest and the most difficult at the same time. It is the easiest, if you agree with my assertion that this world-system is the best possible, and that it agrees with the universal harmony. Scholastically speaking, this can be proven *a posteriori*, from the fact that it has happened. For it is undeniable that everything which exists is the best possible, or rather the most harmonious possible. The proof is that the first

and only cause of what exists is God's mind, since the goal of any mind is harmony and God's mind is the most perfect and harmonious. But if anyone is still unsatisfied with this line of reasoning, I cannot answer him; if he wants an *a priori* proof of this universal harmony, then he asks for something too difficult for a man who has not yet seen the secret vision of God.

Theologian: Would that the world were persuaded of what you have proven so irrefutably: if one views the universe as a whole, then whatever does exist is seen to be the best. If everyone believed this, we would surely have fewer sins, and if everyone bore it in mind, we would have none at all. Everyone would love the Creator and the mouth of atheists would be stopped. Those short-sighted critics of Providence would have to hold their tongues, they who rush to judge the whole melody based on a few notes. They don't realize that, given the near infinity of things, or so to speak, in the reduplication of worlds within worlds (for space is infinitely divisible), no impure mortal can grasp the whole universe. They do not see that the interspersed dissonances make the consonance of the universe all the more exquisite, just as adding two odd numbers produces an even one. They do not grasp that it is the very essence of harmony to unify diverse elements wonderfully into an unexpectedly beautiful whole. Musical composers are not the only artists to practice this; so do the authors of stories intended to amuse, which we call novels. Nevertheless, there is still the question: since souls are initially all identical (before birth), and only become different through the external impressions which they receive, how does the initial choice occur? If they are all the same, why is one soul chosen to be exposed to corrupting influences, and another not? More generally but equivalently, why are identical souls placed in differing times and places and circumstances?

Philosopher: This question seems difficult, but that's more because of the warped way you asked it and less because it's so problematic. Here we touch upon the extremely thorny discussion of the *principle of individuation*, that is, the problem of telling the difference between identical objects, i.e. objects which differ in location alone. For example, two eggs could be so similar that not even an angel could distinguish them (assuming they were perfectly alike) but who can deny that they are different eggs? At least they differ in that one egg is *this egg here* and the other is *that egg there*. Thus we distinguish them by specifying one egg as "this one" and the other as "that one"; in other words, they are different because they can be assigned different numbers (indexed). Counting is just specifying one object after another; so there is no difference whether we count "One, two, three,.." or whether we say "This one, and this one, and this one,.." This specification is equivalent to specifying the time and place of the egg. We could specify it by its motion relative to some object (like ourselves) or by a motion of our own, like pointing at it. Therefore, the specification of identical objects depends on something external and not on the identical things themselves. The only difference that an angel, or I daresay God Himself, could find between our two hypothetical eggs is that one is in position A and the other in position B. Now say you want to distinguish these eggs forever, given that you can't paint them, or label them, or make any mark on them whatsoever: how could you do it? First, you could try keeping them motionless forever, so that the first egg would always be in position A and the other in position B. Secondly, you could fix them in a solid box, so that they would always keep the same orientation. Then by marking the box, you could track them. Lastly, if you let them go wherever they will, you would have to follow every single motion of theirs with your eyes, hands or some other form of contact.

Theologian: You are saying astounding things, which I believe none of of our scholars would even dream of, but which seems undeniable and taken straight from everyday life. Men do exactly as you say when they are trying to distinguish identical objects. But what can we conclude about souls from this discussion?

Philosopher: We can conclude that souls, or as I like to call them, minds, are distinguished initially only by time and position, like our hypothetical eggs. If this is conceded, the whole problem disappears. For to ask why *this* soul and no other was dropped into *these* circumstances, into this time and place (which determines that soul's life and death, including its salvation and damnation) is to ask why this soul is this soul. For if all souls are initially identical, then it makes no difference to substitute one soul for another. *That* soul is equivalent to *this* soul. If a farmer's son is indignant that he was not born the King's son, then he is indignant in vain. For even if their souls had been switched before birth, everything would've turned out exactly the same: the farmer's son would still envy the king's son! This is what I reply to those who are indignant that God didn't immediately replace Adam and Eve with better people after they fell, so that their original sin wouldn't taint all their children. I admonish them, "If God had eliminated that sin, a completely different chain of events would have followed. There would have been completely different people, circumstances and marriages, and thus a completely different human race. So we would not even exist if that sin were removed." Therefore, they have no reason to become indignant over Adam and Eve's sin, and even less over God's toleration of sin, since this is what brought about their existence in the first place. You see how people vex themselves with pointless questions. It's like some half-blood nobleman becoming angry that his father married a peasant girl, without stopping to consider that had his father married another, he would

not have been born, but some other person. Of course people get upset over things even more stupid than this.

Theologian: I have nothing left to ask, criticize or object to. I am just amazed at the unexpected clarity of the whole matter. I would commend you more, did I not fear that people would think that we had some secret understanding.

Philosopher: So let other people be the judge, as long as they are careful and intelligent and pay attention, as long as they employ our definitions and don't bring in new ones, as long as they don't twist my arguments into conclusions I would never dream of, and as long as they eschew malicious quibbling, which is the sign of a disturbed soul. Lastly, they should sincerely want to educate people and defend God's glory.

Theologian: But even if you have made a mistake, it is enough that calumny and envy will never make anything heretical of it. They could never prove that someone who speaks, believes and even dies in this way, is damnable and not to be held as a son of the mother community the Church, or equivalently, as a brother.

Philosopher: I believe that with certainty and supported by that hope, I commend myself to the Universal One, to the Church, to the Christian State, to the wisdom of antiquity and to the accepted way of thinking of our age, and lastly to everyone who reaches a correct conclusion. I cannot help being attacked, but I hope that my critics will not be prejudiced. For I hope that if one considers my arguments carefully and attentively, he will be convinced that my conclusions should be universally recognized as true. But I presume that he will dispense with verbal tricks to muddy the waters and confuse people more than the arguments themselves. Everything ought to be presented as simply as possible. Now I have said nothing of Christ's

benefits, of the help of the Holy Spirit and of the extraordinary cooperation of the divine Grace, since these are all matters of divine revelation. For we agreed among ourselves that I as a catechumen would expound first the theology of philosophers, and you would then introduce me to the mysteries of the revelation of Christian wisdom. This was to help you, Theophilus, as a teacher in recognizing what I already believe and acknowledge, and also to clarify the agreement between faith and reason. We showed how unreasonable are those people who sneer at religion because they are puffed up with knowledge, and also those who, made haughty by revelations, despise philosophy because it reveals their ignorance.

Theologian: I praise your modesty, and I appreciate how much I've profited from our conversation. I rejoice to glean sound arguments from you to stuff in the mouths of people of exceeding impudence, who are not moved by reverence for the sacred scriptures, nor by the consensus, authority and good example of the Holy Fathers. These people who make themselves stubborn for some reason are foolish, as you have shown more clearly than the noonday sun. The time will come (I foresee it and pray for it) when you will be even better prepared for greater tasks, once you have studied the principles of our faith. The light of your reason will exorcise all the shadows and spectres of utterly vain difficulties, which confuse the soul and lead it astray. Farewell.

Extracts from the ‘New Essays on the Understanding’ (1704)

Translated by Frederic Henry Hedge, 1867

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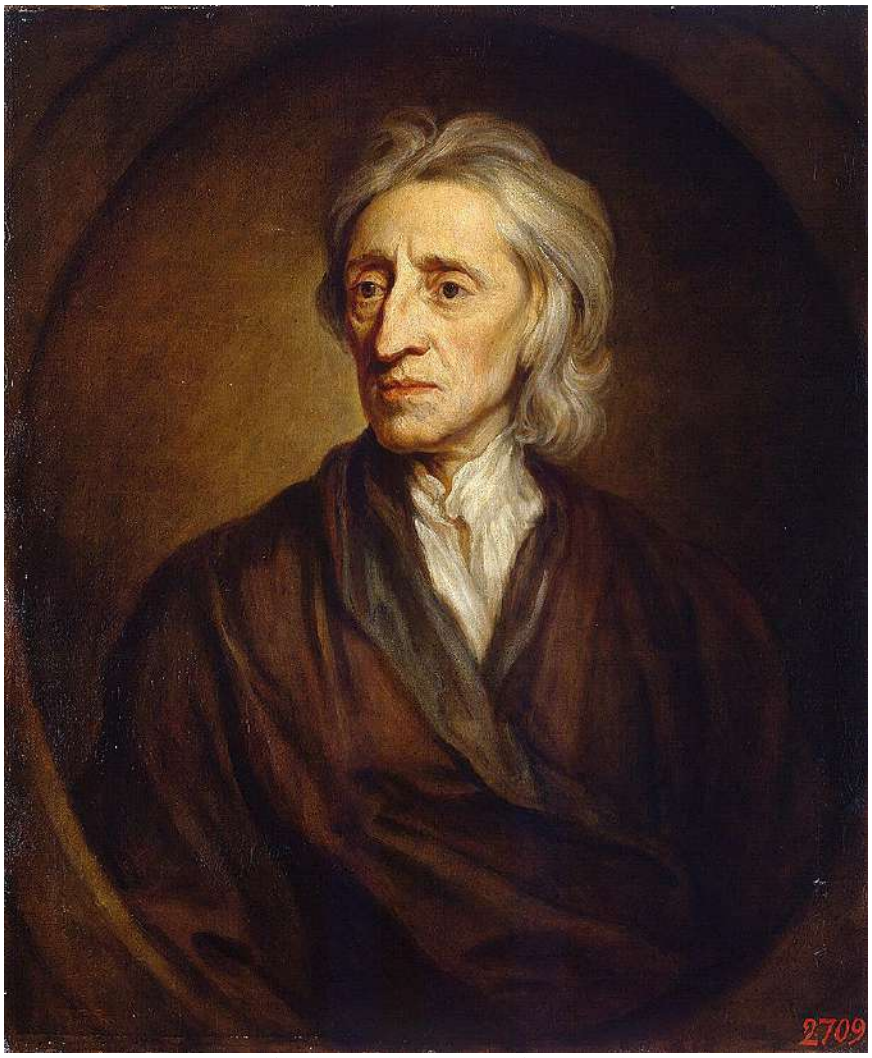

Portrait of John Locke by Godfrey Kneller, 1697

PREFACE.

THE *ESSAY ON the Understanding,* by an illustrious Englishman, being one of the most beautiful and esteemed works of the time, I have resolved to make Remarks on it, because, having sufficiently meditated for a long time on the same subject and upon most of the matters which are therein touched upon, I have thought that it would be a good opportunity to put forth something under the title of *New Essays on the Understanding*, and to obtain a favorable reception for my thoughts by putting them in such good company. I have thought also that I should be able to profit by the work of another, not only to lessen my own (since in fact it is less difficult to follow the thread of a good author than to labor entirely *de novo),* but also to add something to what he has given us, which is always easier than to begin; for I think I have cleared up some difficulties which he had left in their entirety. Thus his reputation is advantageous to me; besides being inclined to do justice, and far from wishing to lessen the esteem in which that work is held, I would increase it, if my approval was of any weight. It is true that I often differ from him, but far from denying the merit of celebrated writers, we bear witness to it, by making known in what and why we separate ourselves from their opinion, when we think it necessary to prevent their authority from prevailing over reason on certain points of importance; besides by satisfying such excellent men, we make truth more acceptable, and it must be supposed that it is principally for truth that they labor.

In fact, although the author of the Essay says a thousand fine things of which I approve, our systems differ very much. His has more relation to Aristotle, and mine to Plato, although we both diverge in many things from the doctrines of these two ancients. He is more popular, and I am forced at

times to be a little more acromatic and more abstract, which is not an advantage to me, especially when I write in a living language. I think nevertheless that by making two persons speak, one of whom expounds the views taken from the Essay of the author and the other joins thereto my observations, the parallel will be more to the liking of the reader than wholly dry remarks the reading of which would be constantly interrupted by the necessity of referring to his hook to understand mine. It will nevertheless he well to compare now and then our writings and not to judge of his views except by his own work, although I have ordinarily preserved its expression. It is true that the subjection which the discourse of another, the thread of which must be followed, gives in making Remarks, has prevented me from thinking to secure the embellishments of which the dialogue is susceptible: but I hope that the matter will make up for the defect of style.

Our differences are on subjects of some importance. The question is to know whether the soul in itself is entirely void like the tablet on which nothing has yet been written (tabula rasa) according to Aristotle and the author of the Essay, and whether all that is traced thereon conies solely from the senses and from experience, or whether the soul contains originally the principles of several notions and doctrines which external objects merely awaken on occasions, as I believe with Plato and even with the schoolmen and with all those who take with this meaning the passage of St. Paul (Romans, 2, 15) where he remarks that the law of God is written in the heart. The Stoics called these principles prolepses, that is to say, fundamental assumptions, or what is taken for granted in advance. The mathematicians call them common notions. Modern philosophers give them other beautiful names, and Julius Scaliger in particular named them semina aeternitatis, also zopyra, as meaning living fires, luminous rays, concealed within us, but which the encounter of the senses makes appear like the

sparks which the blow makes spring from the steel. And it is not without reason that these glitterings are believed to indicate something divine and eternal which appears especially in necessary truths. Whence there arises another question, whether all truths depend on experience, that is to say, on induction and examples, or whether there are some which have still another basis. For if some events can be foreseen before any proof which may have been made of them, it is manifest that we contribute something on our part thereto. The senses although necessary for all our actual knowledge are not sufficient to give it all to us, since the senses never give anything except examples, that is to say, particular or individual truths. Now all the examples of whatever number they he, which confirm a general truth, do not suffice to establish the universal necessity of this same truth, for it does not follow that what has happened will happen just so. For example, the Greeks and Romans and all other peoples of the earth known to the ancients, have always noticed that before the expiration of twenty-four hours day changes into night and the night into day. But we would be deceived if we, believed that the same law holds good everywhere else, for since then the contrary has been experienced in the region of Nova Zembla. And he would still deceive himself who believed that in our climates at least it is a necessary and eternal truth which will last always, since we must think that the earth and the sun themselves do not exist necessarily, and that there will perhaps be a time when that beautiful star will no longer be, at least in its present form, nor all its system. Whence it would seem that necessary truths such as are found in the pure mathematics and especially in arithmetic and in geometry, ought to have principles the proof of which does not depend on examples, nor, consequently, on the testimony of the senses, although without the senses we would never take it into our heads to think of them. This ought to be well recognized, and this is what Euclid has so well understood that he often demonstrates by the reason that which is

sufficiently seen through experience and by sensible images. Logic also, together with metaphysics and ethics, one of which forms theology and the other jurisprudence, both natural, are full of such truths, and consequently their proof can only come from internal principles which are called innate. It is true that we must not imagine that these eternal laws of the reason can be read in the soul as in an open book, as the edict of the pretor is read upon his *album* without difficulty and without search; but it is enough that they can be discovered in us by force of attention, for which occasions are furnished by the senses, and the success of experiences serves also as confirmation to the reason, very much as proofs serve in arithmetic for better avoiding error of reckoning when the reasoning is long. It is also in this that the knowledge of men and that of the brutes differ: the brutes are purely empirics and only guide themselves by examples, for they never, as far as we can judge, come to form necessary propositions; whereas men are capable of demonstrative sciences. It is also for this reason that the faculty which brutes have of making *consecutions* is something inferior to the reason which is in man. The consecutions of the brutes are merely like those of simple empirics, who claim that what has happened sometimes will happen also in a case where that which strikes them is similar, without being able to judge whether the same reasons hold good. This is why it is so easy for men to entrap brutes and so easy for simple empirics to make mistakes. This is why persons who have become skilled by age or by experience are not exempt from error when they rely too much upon their past experience, as has happened to many in civil and military affairs; because they do not sufficiently consider that the world changes and that men become more skilled by finding a thousand new dexterities, whereas deers and hares of the present day do not become more cunning than those of past time. The consecutions of the brutes are only a shadow of reasoning, that is to say, they are but connections of the imagination and passages from

one image to another, because in a new juncture which appears similar to the preceding they expect anew what they found conjoined with it before, as if things were linked together in fact because their images are in the memory. It is true that even reason counsels us to expect ordinarily to see that happen in the future which is conformed to a long past experience, but this is not for this reason a necessary and infallible truth, and success may cease when we expect it least, if the reasons which have sustained it change. This is why the wisest do not rely upon it so much that they do not try to discover something of the reason (if it is possible) of this fact, in order to judge when it will be necessary to make exceptions. For reason is alone capable of establishing sure rules, and of supplying what is lacking to those which were not sure by inserting their exceptions; and of finding, finally, certain connections in the force of necessary consequences, which often gives the means of foreseeing the event without having need of experiencing the sensible connections of images, to which the brutes are reduced; so that that which justifies the internal principles of necessary truths, distinguishes also man from the brutes.

Perhaps our able author will not differ entirely from my opinion. Tor after having employed the whole of his first book in rejecting innate lights, taken in a certain sense, he nevertheless avows at the beginning of the second and in what follows, that the ideas which do not originate in sensation come from reflection. Now reflection is nothing else than attention to what is in us, and the senses do not give us that which we already carry with us. This being so, can it be denied that there is much that is innate in our mind, since we are innate, so to say, in ourselves? and that there is in us ourselves, being, unity, substance, duration, change, action, perception, pleasure, and a thousand other objects of our intellectual ideas? And these objects being immediate to our understanding and always present (although they cannot be always perceived on account of our distractions

and wants), why be astonished that we say that these ideas, with all which depends on them, are innate in us? I have made use also of the comparison of a block of marble which has veins, rather than of a block of marble wholly even, or of blank tablets, that is to say, of what is called among philosophers *tabula rasa.* For if the soul resembled these blank tablets, truths would be in us as the figure of Hercules is in marble when the marble is entirely indifferent toward receiving this figure or some other. But if there were veins in the block, which should mark out the figure of Hercules rather than other figures, the block would be more determined thereto, and Hercules would be in it as in some sort innate, although it would be necessary to labor in order to discover these veins and to cleanse them by polishing and by cutting away that which prevents them from appearing. It is thus that ideas and truths are innate in us, as inclinations, dispositions, habits, or natural capacities, and not as actions; although these capacities are always accompanied by some actions, often insensible, which correspond to them.

It seems that our able author claims that there is nothing virtual in us and nothing even of which we are not always actually conscious, but he cannot take this strictly, otherwise his opinion would be too paradoxical; since, moreover, acquired habits and the stores of our memory are not always consciously perceived and do not even come always to our aid at need, although we often easily bring them back to the mind on some slight occasion which makes us remember them, just as we need but the beginning of a song to remember it. He modifies also his assertion in other places, by saying that there is nothing in us of which we have not been at least formerly conscious. But in addition to the fact that no one can he sure by reason alone how far our past apperceptions which we may have forgotten may have gone, especially according to the reminiscence of the Platonists, which, fabulous as it is, has nothing in it incompatible at least in part with

the bare reason; in addition to this, I say, why is it necessary that all he acquired by us through the perceptions of external things, and that nothing can be unearthed in ourselves? Is our soul then such a blank that, besides the images imprinted from without, it is nothing? This is not an opinion (I am sure) which our judicious author can approve. And where are there found tablets which are not something varied in themselves? For we never see a plain perfectly even and uniform. Why then could we not furnish also to ourselves something of thought from our own depths, if we should dig therein? Thus I am led to believe that at bottom his opinion on this point is not different from mine or rather from the common opinion, inasmuch, as he recognized two sources of our knowledge, the Senses and Reflection.

I do not know whether it will be as easy to bring him in accord with us and with the Cartesians, when he maintains that the mind does not always think and particularly that it is without perception when we sleep without dreaming. And he objects that, since bodies may he without movement, souls may also well be without thought. But here I reply a little differently than is wont to be done, for I maintain that naturally a substance cannot be without action, and even that there is never a body without movement. Experience already favors me, and one has only to consult the hook of the illustrious Mr. Boyle against absolute repose, to be persuaded of it; but I believe that reason also favors it and it is one of the proofs which I have for destroying atoms.

Furthermore there are a thousand indications which lead us to think that there are constantly numberless *perceptions* in us, but without apperception and without reflection; that is to say, changes in the soul itself of which we are not conscious because the impressions are either too slight or in too great a number or too even, so that they have nothing sufficient to distinguish them one from the other, but joined to others, they do not fail to produce their effect and to make themselves felt at least confusedly in the

mass. Thus it is that custom causes us not to take notice of the motion of a mill or of a waterfall when we have lived near it for some time. It is not that the motion does not always strike our organs, and that something does not enter the soul which answers thereto, on account of the harmony of the soul and the body; but these impressions which are in the soul and in body, being destitute of the charms of novelty, are not strong enough to attract our attention and our memory, attached as they are to objects more engrossing. For all attention requires memory, and often when we are not admonished, so to speak, and advised to attend to some of our own present perceptions, we let them pass without reflection and even without being noticed; but if some one calls our attention to them immediately afterwards and makes us notice, for example, some noise which was just heard, we remember it and are conscious of having had at the time some feeling of it. Thus it was with the perceptions of which we were not immediately conscious, the consciousness only coming in this case from the warning after some interval small though it may be. And to judge still better of the minute perceptions which we are unable to distinguish in the crowd, I am accustomed to make use of the example of the roar or noise of the sea which strikes one when on the shore. To understand this noise as it is made it would be necessary to hear the parts which compose the whole, that is to say, the noise of each wave, although each of these little noises only makes itself known in the confused collection of all the others together, that is to say, in the roar itself, and would not be noticed if the wave which makes it was alone. For it must be that we are affected a little by the motion of this wave and that we have some perception of each of these noises however small; otherwise we would not have that of a hundred thousand waves, since a hundred thousand nothings cannot make something. One never sleeps so profoundly but that he has some feeble and confused feeling, and he would never be awakened by the greatest noise in the world if he did not

have some perception of its small beginning, just as one would never break a rope by the greatest effort in the world if it was not stretched and lengthened a little by smaller efforts, although the little extension which they produce does not appear.

These minute perceptions are then of greater efficacy by their consequences than is thought. It is they which form I know not what, these tastes, these images of the sensible qualities, clear in the mass but confused in the parts, these impressions which surrounding bodies make upon us, which embrace the infinite, this connection which each being has with all the rest of the universe. It may even be said that in consequence of these minute perceptions the present is big with the future and loaded with the past, that all things conspire; and that in the least of substances eyes as piercing as those of God could read the whole course of the things in the universe. Quae sint, quae fuerint, quae mox futura trahantur. These insensible perceptions indicate also and constitute the same individual, who is characterized by the traces or expressions which they preserve of the preceding states of this individual, in making the connection with his present state; and these can be known by a superior mind, even if this individual himself should not be aware of them, that is to say, when the express recollection of them will no longer be in him. But they (these perceptions, I say) furnish the means of finding again this recollection at need by the periodic developments which may happen some day. It is for this reason that death can be but a sleep, and cannot indeed continue, the perceptions merely ceasing to be sufficiently distinguished and being, in animals, reduced to a state of confusion which suspends consciousness, but which could not last always; not to speak here of man who must have in this respect great privileges in order to preserve his personality.

It is also through the insensible perceptions that the admirable pre-established harmony of the soul and the body, and indeed of all monads or

simple substances, is to be explained; which supplies the place of the unmaintainable influence of the one upon the others, and which in the judgment of the author of the finest of Dictionaries exalts the greatness of the divine perfections above what has ever been conceived. After this I would add little if I should say that it is these minute perceptions which determine us in many a juncture without it being thought of, and which deceive the vulgar by the appearance of an indifference of equilibrium, as if we were entirely indifferent to turning (for example) to the right, or to the left. It is not necessary also that I notice here, as I have done in the book itself, that they cause that uneasiness which I show consists in something which does not differ from pain except as the small from the great, and which nevertheless often constitutes our desire and even our pleasure, in giving to it a salt which stimulates. It is also the inconceivable parts of our sensible perceptions which produce a relation between the perceptions of colors, of heat and of other sensible qualities and between the motions in bodies which correspond to them, whereas the Cartesians with our author, thoroughly penetrating as he is, conceive the perceptions, which we have of these qualities as arbitrary, that is to say, as if God had given them to the soul according to his good pleasure without having regard to any essential relation between these perceptions and their objects: an opinion which surprises me and which appears to me little worthy of the Author of things who does nothing without harmony and without reason.

In a word, these *insensible perceptions* are of as great use in pneumatics as the insensible corpuscles are in physics, and it is equally as unreasonable to reject the one as the other under the pretext that they are beyond the reach of our senses. Nothing is done all at once, and it is one of my great maxims, and one of the most verified, that *nature never makes leaps:* this is what I called the *Lam of continuity*, when I spoke of it in the first *Nouvelles de la République des Lettres*, and the use of this law is very considerable in

physics. It teaches that we pass always from the small to the great, and *vice versa*, through the medium, in degrees as in parts, and that motion never arises immediately from repose nor is reduced to it except by a smaller motion, just as one never completes running any line or length before having completed a shorter line; although hitherto those who have laid down the laws of motion have not observed this law, believing that a body can receive in an instant a motion contrary to the preceding. And all this leads us to conclude rightly that the *noticeable perceptions* also come by degrees from these which are too minute to be noticed. To think otherwise is to little understand the immense subtilty of things which always and everywhere embraces an actual infinite.

I have also noticed that in virtue of insensible variations, two individual things cannot be perfectly alike, and that they must always differ more than *numéro;* which destroys the blank tablets of the soul, a soul without thought, a substance without action, a void in space, atoms and even particles not actually divided in matter, absolute rest, entire uniformity in one part of time, of space or of matter, perfect globes of the second element, born of perfect and original cubes, and a thousand other fictions of the philosophers which come from their incomplete notions, and which the nature of things does not permit, and which our ignorance and the little attention we give to the insensible, let pass, but which can not be tolerated, unless they are limited to abstractions of the mind which protests that it does not deny what it puts aside and what it thinks ought not enter into any present consideration. Otherwise if it is rightly understood, namely, that ‘things of which we are not conscious, are not in the soul nor in the body, we should be lacking in philosophy as in politics, in neglecting το μιχρον, insensible progress; whereas an abstraction is not an error, provided that we know what it is that we feign in it. Just as mathematicians employ it when they speak of perfect lines which they propose to us, of uniform motions

and of other regulated effects, although *matter* (that is to say, the medley of the effects of the surrounding infinite) makes always some exception. It is in order to distinguish the considerations and to reduce, as far as is possible, the effects to reasons and to foresee some of their consequences, that we proceed thus: for the more attentive we are to neglect no consideration which we are able to regulate, the more practice corresponds to theory. But it pertains only to the Supreme Reason, which nothing escapes, to comprehend distinctly all the infinite and to see all the reasons and all the consequences. All that we can do as regards infinites is to know them confusedly and to know at least distinctly that they are thus; otherwise we judge very wrongly of the beauty and grandeur of the universe; so also we could not have a sound physics which should explain the nature of bodies in general, and still less a sound pneumatics which should comprise the knowledge of God, of souls and of simple substances in general.

This knowledge of insensible perceptions serves also to explain why and how two souls, human or otherwise, of the same kind, never come from the hands of the Creator perfectly alike, and each always has its original relation to the points of view which it will have in the universe. But this it is which already follows from what I have remarked of two individuals, namely, that their *difference* is always *more than numerical.* There is still another point of importance, on which I am obliged to differ not only from the opinions of our author but also from those of the greater part of modern philosophers; this is, that I believe with most of the ancients that all genii, all souls, all simple created substances are always joined to a body and that there never are souls entirely separated. I have *à priori* reasons for this; but this advantage is also found in the doctrine, that it resolves all the philosophical difficulties as to the condition of souls, as to their perpetual conservation, as to their immortality and as to their action. The difference of one of their states from another never being and never having been anything

but that of more sensible to less sensible, of more perfect to less perfect, or *vice versa*, it renders their past or future state as explicable as that of the present. One feels sufficiently, however little reflection one makes, that this is rational, and that a leap from one state to another infinitely different could not be natural. I am astonished that by quitting the natural without reason, the schoolmen have been willing to plunge themselves purposely into very great difficulties and to furnish matter for apparent triumphs of the strong-minded, all of whose reasons fall at a single blow by this explanation of things, where there is no more difficulty in conceiving the conservation of souls (or rather according to me of the animal) than there is in conceiving the change of the caterpillar into the butterfly, and the conservation of thought in sleep, to which Jesus Christ has divinely well compared death. Also I have already said that a sleep could not last always, and it will last least or almost not at all to rational souls who are always destined to preserve the personality which has been given them in the City of God, and consequently remembrance: and this in order to be more susceptible to chastisements and recompenses. And I add also that in general no derangement of the visible organs is able to throw things into entire confusion in the animal or to destroy all the organs and to deprive the soul of all its organic body and the ineffaceable remains of all preceding traces. But the ease with which the ancient doctrine has been abandoned of subtile bodies united to the angels (which was confounded with the corporality of the angels themselves), and the introduction of pretended separate intelligences in creatures (to which those who make the heavens of Aristotle revolve have contributed much), and finally the poorly understood opinion into which we have fallen that the souls of brutes could not be preserved without falling into metempsychosis and without conducting them from body to body, and the embarrassment in which men have been placed by not knowing what to do with them, have caused us, in my opinion, to neglect

the natural way of explaining the conservation of the soul. This has done great injury to natural religion and has made many believe that our immortality was only a miraculous grace of God, of which also our celebrated author speaks with some doubt, as I shall presently remark. But it were desirable that all who are of this opinion had spoken as wisely and with as good faith as he, for it is to be feared that many who speak of immortality through grace do it but to save appearances, and approximate at heart those Averroists and some bad Quietists who picture to themselves an absorption and the reunion of the soul with the ocean of divinity; a notion the impossibility of which perhaps my system alone makes evident.

It seems also that we differ further as regards matter, in that the author thinks a vacuum is here necessary for motion because he thinks that the minute parts of matter are rigid. And I acknowledge that if matter were composed of such parts motion in a *plenum* would be impossible, just as if a room were full of a quantity of small pebbles without there being the least vacant space. But this supposition, for which there appears also no reason, is not admissible, although this able author goes to the point of believing that rigidity or cohesion of minute parts constitutes the essence of body. It is necessary rather to conceive space as full of an originally fluid matter, susceptible of all the divisions and even actually subject to divisions and subdivisions *ad infinitum*, but nevertheless with this difference that it is divisible and divided unequally in different places on account of the motions which already more or less concur there. This it is which causes it to have everywhere a degree of rigidity as well as of fluidity, and which causes no body to be hard or fluid to the highest degree, that is to say, no atom to be found of an insurmountable hardness nor any mass entirely indifferent to division. The order also of nature and particularly the law of continuity destroy both equally.

I have shown also that *cohesion*, which could not itself be the effect of impulse or of motion, would cause a *traction* taken strictly. For if there were a body originally inflexible, for example, an Epicurean atom which should have a part projecting in the form of a hook (since we can conceive atoms of all sorts of figure), this hook pushed would carry with it the rest of the atom, that is to say, the part which is not pushed and which does not fall in the line of impulsion. Nevertheless our able author is himself opposed to these philosophical tractions, such as were attributed formerly to the abhorrence of a vacuum, and he is reduced to *impulse*, maintaining with the moderns that one part of matter operates immediately upon another only by pushing it by contact. In which I think they are right, since otherwise there is nothing intelligible in the operation.

It is however necessary not to conceal the fact that I have noticed a sort of retraction by our excellent author on this subject; whose modest sincerity in this respect I cannot refrain from praising as much as I have admired his penetrating genius on other occasions. It is in the reply to the second letter of the late Bishop of Worcester, printed in 1699, p. 408, where to justify the opinion which he had maintained in opposition to that learned prelate, namely, that matter might think, he says among other things: I admit that I home said (book 2 of the Essay on the Understanding, chap. 8, §11) that body acts by impulse and not otherwise. This also was my opinion when I wrote it, and still at present I cannot conceive in it another manner of acting. But since then I have been convinced by the incomparable booh of the judicious Mr. Newton, that there is too much *presumption in wishing to limit the power of God by our limited conceptions. The gravitation of matter towards matter*, *by ways which cure inconceivable to me*, *is not only a demonstration that God can*, *when it seems good to him*, *put in bodies powers and ways of acting which transcend that which can be derived from our idea of body or explained by what we know of matter*; *but it is further*

an incontestable instance that he has really done so. I shall therefore take care that in the next edition of my book this passage be corrected. I find that in the French version of this book made undoubtedly according to the latest editions it has been put thus in this § 11: *It is evident*, at least so far as we are able to conceive it, *that it is by impulse and not otherwise that bodies act on each other*, *for it is impossible for us to understand that body can act upon what it does not touch*, *which is as much as to imagine that it can act where it is not.*

I cannot but praise that modest piety of our celebrated author, which recognizes that God may do above what we are able to comprehend, and that thus there may be inconceivable mysteries in the articles of faith; but I should not like to be obliged to resort to miracle in the ordinary course of nature, and to admit powers and operations absolutely inexplicable. Otherwise too much license will be given to poor philosophers, under cover of what God can do, and by admitting these *centripetal virtues* or these *immediate attractions* from afar, without its being possible to render them intelligible, I see nothing to hinder our scholastics from saying that everything is done simply by their faculties and from maintaining their intentional species which go from objects to us and find means of entering even into our souls. If this is so, *omnia jam fient, fieri quae posse negabam.* So that it seems to me that our author, quite judicious as he is, goes here a little too much from one extremity to the other. He is squeamish concerning the operations of *souls,* when the question merely is to admit that which is not *sensible,* and now, behold, he gives *to bodies* that which is not even *intelligible,* granting them powers and actions which surpass all that in my opinion a created spirit could do and understand, for he grants them attraction, and that even at great distances, without limiting himself to any sphere of activity, and this to maintain an opinion which does not appear

less inexplicable; namely, the possibility of the thought of matter in the natural order.

The question which he, with the celebrated prelate who attacked him, agitates, is whether matter can think; and as this is an important point, even for the present work, I cannot exempt myself from entering upon it a little and from taking notice of their controversy. I will present the substance of it on this subject and will take the liberty of saying what I think of it. The late Bishop of Worcester, apprehending (but in my opinion without good reason) that our author's doctrine of ideas was liable to certain abuses prejudicial to the Christian faith, undertook to examine some passages of it in his Vindication of the Doctrine of the Trinity; and having done justice to this excellent writer by recognizing that he regards the existence of spirit as certain as that of body, although one of these substances is as little known as the other, he asks (p. 241 seqq.) how reflection can assure us of the existence of spirit, if God can give to matter the faculty of thinking, according to the opinion of our author, bk. 4, chap. 3, since thus the way of ideas which must serve to discern that which is suitable to the soul or the body would become useless; whereas he had said, bk. 2 of the Essay on the Understanding, ch. 23, §§ 15, 27, 28, that the operations of the soul furnish us the idea of mind, and the understanding with the will renders this idea as intelligible to us as the nature of body is rendered by solidity and impulse. This is how our author replies to it in the first letter (p. 65 seqq.): *I believe that I have proved that there is a spiritual substance in us, for we experience in ourselves thought; now this action or this mode could not be the object of the idea of a thing subsisting of itself, and consequently this mode needs a support or subject of inhesion, and the idea of this support forms what we call substance...* For since the general idea of substance is everywhere the same, *it follows that the modification, which is called thought or power of thinking, being joined to it, there results a mind without*

there being need of considering what other modification it has in addition; that is whether it has solidity or not. And on the other hand, the substance which has the modification called solidity will be matter, whether thought be joined to it or not. But if by a spiritual substance you understand an immaterial substance, I confess that I home not proved that there is one in us, and that it cannot be proved demonstratively on my principles. Although what I have said on the systems of matter (bk. 4, ch. 10, § 16), *in demonstrating that God is immaterial, renders it extremely probable that the substance which thinks in us is immaterial —*

However I home shown (adds the author, p. 68) *that the great ends of religion and of morals are assured by the immortality of the soul, without its being necessary to suppose its immateriality.*

The learned Bishop in his reply to this letter, in order to show that our author was of another opinion when he wrote his second hook of the Essay, quotes, p. 51, the passage (taken from the same book, ch. 23, § 15) where it is said, that by the simple ideas which we have deduced from the operations of our mind, we can form the complex idea of a mind. And that putting together the ideas of thought, of perception, of liberty and of power of moving our body, we have as clear a notion of immaterial substances as of material. He quotes still other passages to show that the author opposed mind to body. And he says (p. 54) that the ends of religion and of morals are the better assured by proving that the soul is immortal by its nature, that is, immaterial. He quotes again (p. 70) this passage, that all the ideas which we have of particular and distinct hinds of substances are nothing but different combinations of simple ideas; and that thus the author believed that the idea of thinking and of willing gives another substance different from that which the idea of solidity and of impulse gives, and that (§ 17) he observes that these ideas constitute the body as opposed to mind.

The Bishop of Worcester might add that from the fact that the *general idea* of substance is in the body and in the mind, it does not follow that their *differences* are *modifications* of one and the same thing, as our author has just said in the passage which I have adduced from his first letter. It is necessary to distinguish carefully between modifications and attributes. The faculties of having perception and of acting, extension, solidity, are attributes or perpetual and principal predicates; but thought, impetuosity, figures, movements are modifications of these attributes. Furthermore, we must distinguish between *physical* (or rather real) genus, and *logical* or ideal genus. The things which are of the same physical genus, or which are *homogeneous*, are of the same *matter*, so to speak, and may often he changed the one into the other by the change of the modification, as circles and squares. But two *heterogeneous* things may have a common logical genus, and then their *differences* are not simply accidental modifications of the same subject or of the same metaphysical or physical matter. Thus time and space are very heterogeneous things, and we should do wrong to imagine I know not what real common subject which had but the contained quantity in general and the modifications of which should make time or space appear.

Perhaps some one will mock at these distinctions of philosophers of two genera, the one merely logical, the other real; and of two matters, the one physical which is that of bodies, the other only metaphysical or general; as if some one said that two parts of space are of the same matter or that two hours are also of the same matter among themselves. Nevertheless these distinctions are not merely of terms, but of things themselves, and seem to come in here very appropriately, where their confusion has given rise to a false consequence. These two genera have a common notion, and that of the real genus is common to the two matters, so that their genealogy will be as follows:

Genus: { *Logical* merely, varied by simple *differences*.
{ *Real*, the *differences* of which are *modifications*, that is to say, *matter*. { *Metaphysical* only, where there is homogeneity. *Physical*, where there is a solid homogeneous mass.

I have not seen the second letter from the author to the Bishop, but the reply which this prelate makes to it hardly touches on the point regarding the thinking of matter. But the reply of our author to this second answer, returns to it. God (he says very nearly in these words, p. 397), adds to the essence of matter the qualities and perfections which he pleases, simple movement in some pants, but in plants, vegetation, and in animals, feeling. Those who agree up to this point, cry out as soon as one more step is taken, saying that God can give to matter thought, reason, will, as if this destroyed the essence of matter. But to prove it, they allege that thought or reason is not included in the essence of matter, a point of no consequence, since movement and life are not included in it either. They assert also that we cannot conceive that matter thinks; but our conception is not the measure of the power of God. After this he cites the example of the attraction of matter, p. 99, but especially p. 408, where he speaks of the gravitation of matter toward matter attributed to Mr. Newton (in the terms which I have quoted above), confessing that we could never conceive the manner of it. This is in reality to return to the occult or, what is more, inexplicable qualities. He adds, p. 401, that nothing is more fit to favor the sceptics than to deny what we do not understand; and, p. 402, that we do not conceive even how the soul thinks. He will have it, p. 403, that the two substances, material and immaterial, capable of being conceived in their bare essence without any activity, it depends on God to give to each the power of thinking. And he wishes to take advantage of the avowal of his opponent who had granted

feeling to brutes, but who would not grant them any immaterial substance. It is claimed that liberty and consciousness (p. 408), and the power of making abstractions (p. 409), can be given to matter, not as matter but as enriched by a divine power. Finally he adduces the remark (p. 434) of a traveller as important and as judicious as M. de la Loubere, that the peasants of the east know the immortality of the soul without being able to comprehend its immateriality.

On all this I will remark, before coming to the explanation of my opinion, that it is certain that matter is as little capable of mechanically producing feeling as of producing reason, as our author agrees; that in truth I acknowledge that it is not right to deny what we do not understand, but I add that we are right in denying (at least in the natural order) what is absolutely neither intelligible nor explicable. I maintain also that substances (material or immaterial) cannot be conceived in their bare essence without any activity; that activity belongs to the essence of substance in general; that, finally, the conception of creatures is not the measure of the power of God, but that their conceptivity or force of conceiving is the measure of the power of nature; everything which is conformed to the natural order being capable of being conceived or comprehended by some creature.

Those who would conceive my system will think that I could not conform myself in everything to one or the other of these two excellent authors, whose controversy, however, is highly instructive. But to explain myself distinctly, before all else it is necessary to consider that the modifications which may belong naturally or without miracle to a subject, must come into it from the limitations or variations of a real genus or of a constant and absolute original nature. For it is thus that philosophers distinguish the modes of an absolute being from that being itself; as it is known that size, figure and movement are manifestly limitations and variations of corporeal nature. For it is clear in what way a limited

extension gives figures, and that the change which is made in it is nothing but motion. And every time that we find some quality in a subject, we must believe that if we understood the nature of this subject and of this quality, we should conceive how this quality can result therefrom. Thus, in the order of nature (miracles set aside), it is not optional with God to give to substances indifferently such or such qualities, and he will never give them any but those which shall be natural to them; that is, which can be derived from their nature as explicable modifications. Thus it may be asserted that matter will not naturally have the above mentioned attraction, and will not move of itself in a curved line, because it is not possible to conceive how this takes place there; that is, to explain it mechanically; whereas that which is natural, must be able to become distinctly conceivable if we were admitted into the secrets of things. This distinction between what is natural and explicable and what is inexplicable and miraculous, removes all the difficulties; and by rejecting it, we should maintain something worse than the occult qualities; and in this we would renounce philosophy and reason, by opening retreats for ignorance and idleness, through a dead system which admits not only that there are qualities which we do not understand, of which there are only too many, but also that there are some which the greatest mind, if God gave him all the opening possible, could not comprehend; that is, which would be either miraculous or without rhyme and reason; and also that God should make miracles ordinarily, would be without rhyme and reason, so that this useless hypothesis would destroy equally our philosophy which seeks reasons, and divine wisdom which furnishes them.

Now, as to thought, it is certain, and the author recognizes it more than once, that it could not be an intelligible modification of matter or one which could be comprehended and explained; that is to say, that the feeling or thinking being is not a mechanical thing like a clock or a mill, such that we

might conceive sizes, figures and movements, the mechanical conjunction of which might produce something thinking and even feeling in a mass in which there was nothing such, which should cease also in the same way by the irregularity of this mechanism. It is hence not natural to matter to feel and to think; and this can only take place within it in two ways, one of which will be that God should join to it a substance, to which it is natural to think, and the other that God should put thought in it by miracle. In this, then, I am entirely of the opinion of the Cartesians, except that I extend it even to brutes and that I believe that they have feeling and immaterial souls (properly speaking) and are as imperishable as the atoms of Democritus or Gassendi; whereas the Cartesians, groundlessly embarrassed by the souls of brutes and not knowing what they are to do with them if they are preserved (for want of having bethought themselves of the preservation of the same animal reduced to miniature), have been forced, contrary to all appearances and to the judgment of the human race, to deny even feeling to brutes.

But if some one should say that God at least may add the faculty of thinking to the prepared mechanism, I would reply that if this were done and if God added this faculty to matter without depositing in it at the same time a substance which was the subject of inhesion of this same faculty (as I conceive it), that is to say, without adding to it an immaterial soul, it would be necessary that matter should he miraculously exalted in order to receive a power of which it is not naturally capable; as some scholastics claim that God exalts fire even to the point of giving it the force to burn immediately spirits separated from matter, a thing which would be a miracle, pure and simple. And it is enough that it cannot be maintained that matter thinks without putting thereto an imperishable soul or a miracle, and that thus the immortality of our souls follows from that which is natural, since their extinction could be effected only by a miracle, whether by exacting matter or by annihilating the soul. For we well know that the power of God could

render our souls mortal, however immaterial (or immortal by nature alone) they may be, for he can annihilate them.

Now this truth of the immateriality of the soul is undoubtedly of importance. For it is infinitely more advantageous to religion and to morals, especially in the times in which we live (when many people hardly respect revelation alone and miracles), to show that souls are immortal naturally, and that it would be a miracle if they were not, than to maintain that our souls ought naturally to die, but that it is by virtue of a miraculous grace, founded in the promise of God alone, that they do not die. Also for a long time it has been known that those who have wished to destroy natural religion and reduce all to revealed religion, as if reason taught us nothing concerning it, have been regarded with suspicion, and not always without reason. But our author is not of this number; he maintains the demonstration of the existence of God, and he attributes to the immateriality of the soul a *probability* in *the highest degree*, which could pass consequently for a *moral certainty,* so that I imagine that, having as much sincerity as penetration, he could accommodate himself easily to the doctrine which I have just stated and which is fundamental in every rational philosophy; for otherwise I do not see how one can prevent himself from falling back into the *fanatical philosophy*, such as the *Philosophia Mosaica* of Fludd which saves all phenomena by attributing them to God immediately and by miracle, or into the *barbaric* philosophy, like that of certain philosophers and physicians of the past, which still bore the marks of the barbarity of their century and which is to-day with reason despised, who saved appearances by forging expressly occult qualities or faculties which they imagined to be like little demons or goblins capable of producing unceremoniously that which is demanded, just as if watches marked the hours by a certain horodeictic faculty without having need of wheels, or as if mills crushed grains by a fractive faculty without needing anything

resembling mill-stones. As to the difficulty which many people have had in conceiving an immaterial substance, it will easily cease (at least in good part) when they do not demand substances separated from matter; as indeed I do not believe there ever are any naturally among creatures.

BOOK I. — OF INNATE IDEAS.

CHAPTER I. [II IN LOCKE.]

Are there Innate Principles in the Mind of Man?

IT IS NECESSARY that I tell you anew that I am no longer a Cartesian, and that nevertheless I am farther removed than ever from your Gassendi, whose knowledge and merit I elsewhere recognize. I have been impressed by a new system, of which I have read something in the philosophical journals of Paris, of Leipsic, and of Holland, and in the marvellous Dictionary of M. Bayle, article *Rorarius;* and since then I believe I see a new aspect of the interior of things. This system appears to unite Plato with Democritus, Aristotle with Descartes, the scholastics with the moderns, theology and ethics with reason. It seems to take the best from every side and then afterwards to go farther than any one has yet gone. I find in it an intelligible explanation of the union of the soul and body, a thing of which I had before despaired. I find the true principles of things in the Unities of Substance which this system introduces, and in their harmony preëstablished by the primitive substance. I find in it a surprising simplicity and uniformity, so that it may be said that it is everywhere and always the same thing, nearly in the degrees of perfection. I see now what Plato meant when he took matter for an imperfect and transitory entity, what Aristotle meant by his entelechy; what the promise which Democritus himself made of another life is, with Pliny; just how far the Sceptics were right in inveighing against the senses; how the animals are in reality automata according to Descartes, and how they have, nevertheless, souls and feeling according to the opinion of the human race; how it is necessary to explain rationally those who have lodged life and perception in all things, like Cardan, Campanella, and better than they, the late Countess of Connaway, a

Platonist, and our friend, the late M. François Mercure van Helmont (although elsewhere bristling with unintelligible paradoxes), with his friend, the late Mr. Henry More. How the laws of nature (a large part of which were unknown before this system) have their origin in principles superior to matter, and how, nevertheless, everything takes place mechanically in matter; in which respect the spiritualistic authors whom I have just mentioned, had failed with their Archaei and even the Cartesians, in believing that immaterial substances changed if not the force, at least the direction or determination of the motions of bodies, whereas the soul and body perfectly retain their laws, each its own, according to the new system, and yet one obeys the other as far as is necessary. Finally, it is since I have meditated on this system that I have found out how the souls of brutes and their sensations are not at all prejudicial to the immortality of human souls, or, rather, how nothing is more adapted to establish our natural immortality than to conceive that all souls are imperishable *(morte carent animae),* without, however, there being metempsychoses to be feared, since not only souls but also animals remain and will remain living, feeling, acting; it is everywhere as here, and always and everywhere as with us, according to what I have already said to you. Unless it be that the states of animals are more or less perfect and developed, without there ever being need of souls altogether separate, while nevertheless, we always have minds as pure as possible, notwithstanding our organs, which cannot disturb by any influence, the laws of our spontaneity. I find the vacuum and atoms excluded very differently than by the sophism of the Cartesians, founded on the pretended coincidence between the idea of body and of extension. I see all things regulated and adorned beyond anything conceived of up to this time, matter everywhere organic, no sterile, neglected vacuum, nothing too uniform, everything varied but with order; and what surpasses the imagination, the whole universe in epitome, but with a different aspect in

each of its parts and even in each of its unities of substance. In addition to this new analysis of things, I have better understood that of notions or ideas and of truths. I understand what is a true, clear, distinct, adequate idea, if I dare adopt this word. I understand what are primitive truths, and true axioms, the distinction between necessary truths and those of fact, between the reasoning of men and the consecutions of brutes which are a shadow of it. Finally, you will be surprised, sir, to hear all that I have to say to you, and especially to understand how knowledge of the greatness and perfection of God is thereby exalted. For I cannot conceal from you, from whom I have had nothing secret, how much I am imbued now with admiration and (if we may venture to make use of this term) with love for this sovereign source of things and of beauties, having found that those which this system reveals, surpass everything hitherto conceived. You know that I had gone a little too far formerly, and that I began to incline to the side of the Spinozists, who leave only infinite power to God, without recognizing either perfection or wisdom as respects him, and, scorning the search after final causes, derive everything from brute necessity. But these new lights have cured me of this.

§ 1. I have always favored, as I do still, the innate idea of God which M. Descartes maintained, and consequently other innate ideas which cannot come to us from the senses. Now I go still farther in conformity with the new system, and I even believe that all the thoughts and actions of our soul come from its own depths and cannot be given to it by the senses, as you shall see in the sequel. But at present I shall set aside this investigation, and accommodating myself to the received expressions, since in truth they are good and maintainable and since in a sense it may be said that the external senses are in part causes of our thoughts, I shall examine how in my opinion it must be said, even in the common system (speaking of the action of bodies on the soul, as the Copernicans speak with other men of the motion

of the sun, and with reason), that there are ideas and principles which do not come to us from the senses, and which we find in us without forming them, although the senses give us occasion to become conscious of them.

I imagine that your able author has remarked that under the name of innate principles one often maintains his prejudices, and wishes to exempt himself from the trouble of discussions, and that this abuse has animated his zeal against this supposition. He has wished to combat the indolence and the superficial manner of thinking of those who, under the specious pretext of innate ideas and truths engraved naturally on the mind, to which we easily give assent, do not concern themselves with seeking and examining the sources, connections and certainty of this knowledge. In this I am altogether of his opinion, and I even see farther. I would that our analysis should not be limited, that definitions of all terms capable thereof should be given, and that all the axioms which are not primitive, should be demonstrated or the means of demonstrating them be given; without distinguishing the opinion which men have thereof, and without caring whether they give their consent thereto or not. This would be more useful than is thought. But it seems that the author has been carried too far on the other side by his zeal, otherwise highly praiseworthy. He has not sufficiently distinguished, in my opinion, the origin of necessary truths whose source is in the understanding, from that of the truths of fact, drawn from the experiences of the senses, and even from the confused perceptions which are in us. You see therefore, sir, that I do not admit what you lay down as fact, that we can acquire all our knowledge without having need of innate impressions. And the sequel will show which of us is right.

§ § 2. 3. 4. I do not base the certainty of innate principles on universal consent, for I have already told you that my opinion is that we ought to labor to be able to prove all the axioms which are not primitive. I grant also that a consent very general, but which is not universal, may come from a

tradition diffused throughout the human race, as the practice of smoking tobacco has been received by almost all nations in less than a century, although some islanders have been found who, not knowing even fire, were unable to smoke. Thus some able people, even among theologians, but of the party of Arminius, have believed that the knowledge of the Divinity came from a very ancient and general tradition; and I believe indeed, that instruction has confirmed and rectified this knowledge. It appears, however, that nature has aided in reaching it without instruction; the marvels of the universe have made us think of a superior power. A child born deaf and dumb has been seen to show veneration for the full moon, and nations have been found who seemed not to have learned anything else of other people, fearing invisible powers. I grant that this is not yet the idea of God, such as we have it and as we demand; but this idea itself does not, cease to be in the depths of our souls, without being placed there, as we shall see, and the eternal laws of God are in part engraved thereon in a way still more legible, and by a sort of instinct. But, they are practical principles of which we shall also have occasion to speak. It must be admitted, however, that the inclination which we have to recognize the idea of God, lies in human nature. And even if the first instruction therein should be attributed to Revelation, the readiness which men have always shown to receive this doctrine comes from the nature of their souls. I conclude that a sufficiently general consent among men is an indication and not a demonstration of an innate principle; but that the exact and decisive proof of these principles consists in showing that their certainty comes only from what is in us. To reply again to what you say against the general approbation given to the two great speculative principles, which are nevertheless the best established, I may say to you that even if they were not known, they would none the less be innate, because they are recognized as soon as heard; but I will add further, that at bottom everyone knows them and makes use at, every

moment of the principle of contradiction (for example) without examining it distinctly, and there is no barbarian, who, in a matter which he considers serious, would not be shocked at the conduct of a liar who contradicts himself. Thus these maxims are employed without being expressly considered. And it is very much so that we have virtually in the mind the propositions suppressed in enthymemes, which are set aside not only externally, but also in our thought.

§ 5. *Not on the mind naturally imprinted*, *because not known to children*, *idiots*, *dec.]* If you are so prejudiced as to say that there are truths imprinted on the soul which it does not perceive, am not surprised that you reject innate knowledge. But I am astonished that it has not occurred to you that we have an infinity of knowledge of which we are not always conscious, not even when we have need of it. It is for memory to retain it and for reminiscence to represent it to us, as it often does, but not always when needed. This is very well called remembrance (*subvenire*), for reminiscence requires some help. And it must he that in this multiplicity of our knowledge we are determined by something to renew one rather than another, since it is impossible to think distinctly and at once of *all that we know.* In a sense it must be said that all arithmetic and all geometry are innate and are in us virtually, so that they may be found there if we consider attentively and arrange what is already in the mind, without making use of any truth learned by experience or by the tradition of others, as Plato has shown in a dialogue, where he introduces Socrates leading a child to abstract truths by mere questions, without telling him anything. We may therefore invent these sciences in our libraries and even with closed eyes, without learning by sight or even by touch, the truths which we need; although it is true that we would not consider the ideas in question if we had never seen or touched anything.

Since an acquired knowledge may be concealed in the soul by the memory, as you admit, why could not nature have also hidden there some original knowledge? Must everything which is natural to a substance which knows itself, be known there actually in the beginning? Can not and must not this substance (such as our soul), have many properties and modifications, all of which it is impossible to consider at first and altogether? It was the opinion of the Platonists that all our knowledge was reminiscence and that thus the truths which the soul has brought along at the birth of the man and which are called innate, must be the remains of an express anterior knowledge. But this opinion has no foundation. And it is easy to judge that the soul must already have innate knowledge in the preceding state (if pre-existence were a fact), however distant it might be, just as here; it therefore would have to come also from another preceding state, or it would be finally innate or at least concreate, or it would be necessary to resort to the infinite and make souls eternal, in which case this knowledge would be innate in truth, from the fact that it would never have a beginning in the soul; and if someone claimed that each anterior state has had something from another more anterior which it has not left to the succeeding, the reply will be made, that it is manifest that certain evident truths must have been in all these states. And in whatever way it may be taken, it is always clear in all the states of the soul that necessary truths are innate and are proved by what is internal, it not being possible to establish them by experiences as we establish truths of fact. Why should it be necessary also that we could possess nothing in the soul of which we had never made use? And is to have a thing without making use of it the same thing as to have merely the faculty of acquiring it? If it were so, we should never possess anything except the things which we enjoy; whereas we know that in addition to the faculty and the object, there must often be some

disposition in the faculty or in the object or in both, in order that the faculty be exercised upon the object.

If the mind had only the simple capacity of receiving knowledge or passive power for that, as indeterminate as that which the wax has for receiving figures, and a blank tablet for receiving letters, it would not be the source of necessary truths, as I have just shown it to be; for it is incontestable that the senses do not suffice to show their necessity, and that thus the mind has a disposition (as much active as passive) to draw them itself from its depths; although the senses are necessary in order to give it the occasion and attention for this, and to carry it to some rather than to others. You see, therefore, sir, that these people, otherwise very able, who are of a different opinion, seem not to have sufficiently meditated on the consequences of the difference which there is between necessary or eternal truths and the truths of experience, as I have already remarked, and as all our discussion shows. The original proof of the necessary truths comes from the understanding alone, and the other truths come from experiences or from the observations of the senses. Our mind is capable of knowing both, but it is the source of the former; and whatever number of particular experiences we may have of a universal truth, we could not be assured of it forever by induction, without knowing its necessity through the reason.

§ 11. It is the particular relation of the human mind to these truths which renders the exercise of the faculty easy and natural as respects them, and which causes them to be called innate. It is therefore, not a naked faculty which consists in the mere possibility of understanding them; it is a disposition, an aptitude, a preformation, which determines our soul and which brings it about that they may be derived from it. Just as there is a difference between the figures which are given to the stone or marble indifferently, and those which its veins already mark out or are disposed to mark out if the workman profits by them.

The intellectual ideas, which are the source of necessary truths, do not come from the senses; and you recognize that there are ideas which are due to the reflection of the mind when it reflects upon itself. For the rest, it is true that the express knowledge of truths is posterior *(tempore vel natura)* to the express knowledge of ideas; as the nature of truths depends on the nature of ideas, before we expressly form one or the other, and the truths into which the ideas which come from the senses enter, depend on the senses, at least in part. But the ideas which come from the senses are confused, and the truths which depend upon them are confused also, at least in part; whereas the intellectual ideas and the truths which depend on them, are distinct, and neither the one class nor the other has its origin in the senses, although it may be true that we would never think of them without the senses.

§ 18. *[If such am, assent be a mark of innate, then, that one and two are equal to three, that sweetness is not bitterness, and a thousand the like, must be innate.]* I do not see how this: what is the same thing is not different, can be the origin of the principle of contradiction, and easier; for it seems to me that you give yourself more liberty by advancing that A is not B, than by saying that A is not non-A. And the reason which prevents A from being B, is that B includes non-A. For the rest, the proposition: the sweet is not the bitter, is not innate, according to the meaning which we have given to the term innate truth. For the feelings of sweet and of bitter come from the external senses. Thus it is a mixed conclusion *(hybrida conclusio),* where the axiom is applied to a sensible truth. But as for this proposition: *the square is not a circle,* it may be said to be innate, for in considering it, you make a subsumption or application of the principle of contradiction to what the understanding itself furnishes as soon as you are conscious of innate thoughts.

§ 19. *[Such less general propositions known before these universal maxims.]* We build on these general maxims, as we build on majors which are suppressed when we reason by enthymemes; for although very often we do not think distinctly of what we do in reasoning, any more than of what we do in walking and jumping, it is always true that the force of the conclusion consists partly in what is suppressed and could not come from elsewhere, as will be found if you should wish to prove it.

§ 20. *[One and one equal to two, &c. not general nor useful, answered.]* It is true that we begin sooner to perceive particular truths, when we begin by more composite and gross ideas; but this does not prevent the order of nature from beginning with the most simple, and the reason of more particular truths from depending on the more general, of which they are only examples. And when we wish to consider what is in us virtually, and before all apperception, we are right in beginning with the most simple. For the general principles enter into our thoughts, of which they form the soul and the connection. They are as necessary to it as the muscles and sinews are for walking, although we do not think of it. The mind leans upon these principles at all times, but it does not so easily come to distinguish them and to represent them to itself distinctly and separately, because that requires great attention to what it does, and most people, little accustomed to meditate, have hardly any. Have not the Chinese, like ourselves, articulate sounds? and yet being attached to another way of writing, they have not yet thought of making an alphabet of these sounds. It is thus that one possesses many things without knowing it.

§ 21. *[These maxims not being known sometimes till proposed, proves them not innate.]* The nature of things and the nature of the mind agree. And since you oppose the consideration of the thing to the apperception of that which is engraved on the mind, this objection itself shows, sir, that those whose side you take, understand by *innate truths* only those which

would be approved naturally as by *instinct,* and even without knowing it, unless confusedly. There are some of this nature, and we shall have occasion to speak of them. But that which is called *natural light* supposes a distinct knowledge, and very often the consideration of the nature of things is nothing else than the knowledge of the nature of our mind and of these innate ideas which we do not need to seek outside. Thus I call innate, those truths which need only this consideration in order to be verified. I have already replied § 5, to the objection § 22, which claimed that when it is said that innate ideas are implicitly in the mind, this must mean simply, that it has the faculty of knowing them; for I have shown that in addition to this, it has the faculty of finding them in itself, and the disposition to approve them when it thinks of them as it should.

§ 23. *[The argument of assenting on first hearing, is upon a false supposition of no precedent teaching.]* I would name as propositions whose ideas are innate, the propositions of arithmetic and geometry, which are all of this nature, and as regards necessary truths, no others could be found.

§ 25. *[These maxims not the first known.]* The apperception of that which is in us, depends upon attention and order. Now, it is not only possible, but it is also proper, that children pay more attention to the ideas of the senses, because the attention is regulated by the need. The result, however, shows in the sequel, that nature has not uselessly given herself the trouble of impressing upon us innate knowledge, since without it there would be no means of arriving at actual knowledge of the truths necessary in the demonstrative sciences, and at the reasons of facts; and we should possess nothing above the brutes.

§ 26. *[And so not innate.]* Not at all, for thoughts are actions; and knowledge or truths, in so far as they are in us, even when we do not think of them, are habits or dispositions; and we know very many things of which we hardly think.

[It is very difficult to conceive that a truth be in the mind, if the mind has never thought of this truth.]

It is as if someone said that it is difficult to conceive that there are veins in marble before they are discovered. This objection also seems to approach a little too much the *petitio principii.* All those who admit innate truths without basing them upon the Platonic reminiscence, admit those of which they have not yet thought. Moreover, this reasoning proves too much; for if truths are thoughts, we should be deprived not only of the truths of which we have never thought, but also of those of which we have thought and of which we no longer actually think; and if truths are not thoughts but habits, and aptitudes, natural or acquired, nothing prevents there being some in us of which we have never thought, nor will ever think.

§ 27. *[Not innate, because they appear least where what is innate shows itself clearest.]* I believe that we must reason here very differently. Innate maxims, appear only through the attention which is given them; but these persons *[children, idiots, savages]*, have very little of it, or have it for entirely different things. They think of hardly anything except the needs of the body; and it is reasonable that pure and detached thoughts should be the prize of nobler pains. It is true that children and savages have the mind less altered by customs, but they also have it exalted by the teaching which gives attention. It would not be very just that the brightest lights should burn better in minds which deserve them less, and which are enveloped in thicker clouds. I would not like one to give too much honor to ignorance and barbarity, when one is as learned and as clever as you are; that would be to depreciate the gifts of God. Some one will say, that the more ignorant one is, the nearer he will approach to the advantage of a block of marble or of a piece of wood, which are infallible and sinless. But unfortunately, it is not in this way that one approaches thereto; and as far as we are capable of

knowledge, we sin in neglecting to acquire it, and we shall fail so much the more easily as we are less instructed.

BOOK II. — OF IDEAS.

CHAPTER I.

Of Ideas in general, and whether the soul always thinks.

§ 1. *[IDEA is the object of thinking.]* I admit it, provided that you add that it is an immediate internal object, and that this object is an expression of the nature or of the qualities of things. If the idea were the *form* of thought, it would come into existence, and would cease with the actual thoughts which correspond to it; but in being its object it might be anterior and posterior to thoughts. The external sensible objects are but *mediate,* because they cannot act immediately upon the soul. God alone is the *immediate external* object. It might be said that the soul itself is its own immediate *internal* object; but it is so in so far as it contains ideas or what corresponds to things; for the soul is a microcosm in which distinct ideas are a representation of God, and in which confused ideas are a representation of the universe.

§ 2. *[All ideas come from sensation or reflection.]* The tabula rasa, of which so much is said, is, in my opinion, a fiction which nature does not admit of, and which has its foundation in the incomplete notions of philosophers, like the vacuum, atoms, and rest, absolute or relative, of two parts of a whole, or like the materia prima which is conceived as without form. Uniform things and those which contain no variety, are never anything but abstractions, like time, space, and the other entities of pure mathematics. There is no body, the parts of which are at rest, and there is no substance which has nothing by which to distinguish it from every other. Human souls differ not only from other souls, but also among themselves, although the difference is not of the nature which is called specific. And according to the demonstrations, which I think I have, everything

substantial, whether soul or body, has its relation, which is peculiar to itself, to each of the others, and the one must always differ from the other by intrinsic characteristics; not to mention that those who speak so much of this tabula rasa, after having taken away from it ideas are not able to say what is left to it, like the scholastic philosophers who leave nothing to their materia prima. It may, perhaps, be answered that this tabula rasa of the philosophers means that the soul has naturally and originally only bare faculties. But faculties without some act, in a word, the pure powers of the school, are also but fictions unknown to nature, and which are obtained only by abstraction. For where in the world will there ever be found a faculty which confines itself to the mere power, without exercising any act? There is always a particular disposition to action, and to one action rather than to another. And besides the disposition, there is a tendency to action, of which tendencies there is always an infinity at once in each subject; and these tendencies are never without some effect. Experience is, I admit, necessary in order that the soul be determined to such or such thoughts, and in order that it take notice of the ideas which are in us; but by what means can experience and the senses give ideas? Has the soul windows? does it resemble tablets? is it like wax? It is evident that all who think of the soul thus, make it at bottom corporeal. This axiom received among the philosophers, will be opposed to me, that there is nothing in the soul which does not come from the senses. But the soul itself and its affections must be excepted. Nihil est in intellectu, quod, non fuerit in sensu, excipe: nisi ipse intellectus. blow the soul comprises being, substance, unity, identity, cause, perception, reason, and many other notions which the senses cannot give.

In order to avoid a discussion upon what has delayed us too long, I declare to you in advance, sir, that when you say that ideas come to us from one or the other of these causes *[sensation or reflection]*, I understand it of

their *actual* perception, for I think that I have shown that they are in us before they are perceived, so far as they have anything distinct about them.

§§ 9 and 10. *[The soul begins to home ideas when it begins to perceive. The soul thinks not always.]* Action is no more connected with the soul than with body; a state without thought in the soul and an absolute repose in body, appear to me equally contrary to nature and without example in the world. A substance once in action will be so always, for all the impressions remain and are merely mixed with other new ones. By striking a body we excite or rather determine an infinity of vortices, as in a liquid, for at bottom every solid has a degree of liquidity, and every liquid a degree of solidity, and there is no means of ever arresting entirely these internal vortices. Now we may believe that if body is never in repose, the soul, which corresponds to it, will never be without perception either.

It is certain that we slumber and sleep, and that God is exempt from this. But it does not follow that while sleeping we are without perception. Bather just the opposite is found to be the case, if it is well considered.

Beal powers are never simple possibilities. There is always tendency and action.

I do not say that it is self-evident that the soul always thinks. A little attention and reasoning is needed to discover it. The common people perceive it as little as the pressure of the air or the roundness of the earth.

It is decided as it is proved that there are imperceptible bodies and invisible movements, although certain persons ridicule them. There are likewise, numberless perceptions which are not sufficiently distinguished for them to be perceived or remembered, but they are made known by certain consequences.

I have not read the book which contains this objection *[that it is an inference from Locke's position, that a thing is not, because we are not sensible of it in our sleep]*, but it would pot have been wrong to object to

you, that it does not follow because the thought is not perceived that it ceases for that reason; for otherwise it could be said for the same reason, that there is no soul during the time when it is not perceived. And in order to refute this objection it is necessary to point out in particular of the thought that it is essential to it that it be perceived.

§ 11. *[It is not always conscious of it.]* There *[that it is not easy to conceive that a thing can think and not be conscious that it thinks]* is, undoubtedly, the knot of the affair and the difficulty which has embarrassed able men. But here is the means of getting out of it. We must consider that we think of many things at once, but we attend only to the thoughts which are most important; and it could not be otherwise, for if we attend to all it would be necessary to think attentively of an infinity of things at the same time, all of which we feel and which make an impression upon our senses. I say even more: there remains something of all our past thoughts and none can ever be entirely effaced. Now when we sleep without dreaming and when we are stunned by some blow, fall, symptom or other accident, there is formed within us an infinite number of minute confused sensations, and death itself can produce no other effect upon the souls of animals who without doubt ought, sooner or later, to acquire important perceptions, for all goes in an orderly manner in nature. I acknowledge, however, that in this state of confusion, the soul would be without pleasure and without pain, for these are noticeable perceptions.

§ 12. *[If a sleeping man thinks without knowing it, the sleeping and waking man are two persons.]* I, in turn, will make you another supposition, which appears more natural. Is it not true that it must be admitted that after some interval or some great change, one may fall into a condition of general forgetfulness? Sleidan, it is said, before his death, forgot all that he knew; and there are numbers of other examples of this sad occurrence. Let us suppose that such a man became young again and learned all de novo.

Would he be another man for all that? It is not then memory which properly makes the same man; nevertheless, the fiction of a soul which animates different bodies by turns without what happens to it in one of these bodies interesting it in the other, is one of those fictions contrary to the nature of things, which come from the incomplete notions of the philosophers, like space without body, and body without motion, and which disappear when one penetrates a little farther; for it must be known that each soul preserves all its preceding impressions and cannot divide itself equally in the way just mentioned. The future in each substance has a perfect connection with the past. It is this which constitutes, the identity of the individual. Moreover, memory is not necessary nor even always possible, on account of the multitude of present and past impressions which cooperate toward our present thoughts for I do not believe there are in man thoughts of which there is not some effect at least confused, or some remnant mixed with subsequent thoughts. Many things can be forgotten, but they could also be remembered long afterward if they were recalled as they should be.

§ 13. *[Impossible to convince those that sleep without dreaming, that they think.]* One is not without some feeble feeling while asleep, even when the sleep is dreamless. Waking itself shows it, and the easier it is to awaken one, the more feeling one has of what is going on without him, although this feeling is not always sufficiently strong to cause the awakening.

§ 15. *[Upon this hypothesis, the thoughts of a sleeping man, ought to be the most rational.]* All impressions have their effect, but all the effects are not always noticeable. When I turn to one side rather than to another, it is very often through a series of minute impressions of which I am not conscious, and which render one movement a little more uncomfortable than the other. All our unpremeditated actions are the results of a cooperation of minute perceptions, and even our customs and passions, which have such influence in our deliberations, come therefrom; for these

habits grow little by little, and consequently without the minute perceptions, we should not arrive at these noticeable dispositions. I have already remarked that he who would deny these effects in morals, would imitate the poorly instructed persons who deny insensible corpuscles in physics; and yet I see that there are among those who speak of liberty those who, taking no notice of these insensible impressions, capable of inclining the balance, imagine an entire indifference in moral actions, like that of the ass of Buridan divided equally between two meadows. And of this we shall speak more fully in what follows. I acknowledge, however, that these impressions incline without necessitating.

§ 23. *[When does a man begin to have ideas?]* I am of the same opinion *[namely, that it is when he has some sensation]*; but it is by a principle a little peculiar, for I believe that we are never without thoughts and also never without sensation. I distinguish only between ideas and thoughts; for we have always all pure or distinct ideas independently of the senses; but thoughts always correspond to some sensation.

§ 25. *[In the perception of simple ideas the soul is for the most part passive.]* How can it be that it is merely passive with regard to the perception of all simple ideas, since, according to your own avowal, there are simple ideas the perception of which comes from reflection, and since the mind gives itself thoughts from reflection, for it is itself which reflects? Whether it can refuse them is another question, and it cannot do it undoubtedly without some reason which turns it aside from them, when there is some occasion for it.

CHAPTER IV.

Of solidity.

§ 1. *[We receive this idea from touch.]* And at bottom solidity, in so far as the notion is distinct, is conceived by the pure reason, although the senses furnish to the reason that by which to prove that it is in nature.

CHAPTER V.

Of simple ideas of divers senses.

THESE IDEAS WHICH are said to come from more than one sense, as those of space, figure, motion, rest, are given us rather by the common sense, that is to say, the mind itself, for these are ideas of the pure understanding, but which have relation to that which is exterior and which the senses make us perceive; also they are capable of definitions and demonstrations.

CHAPTER VII.

Of ideas which come from sensation and from reflection.

§1. *[Pleasure and pain, power, existence, etc.]* It seems to me that the senses could not convince us of the *existence* of sensible things without the aid of the reason. Thus I believe the consideration of existence comes from reflection. Those of *power* and of *unity* come also from the same source and are of an entirely different nature from the perceptions of pleasure and of pain.

CHAPTER VIII.

Other considerations concerning simple ideas.

§ *[Privative Qualities.]* I had not believed that the privative nature of repose could be doubted. It suffices for it that motion in body be denied; but it does not suffice for motion that repose be denied, and something more must be added in order to determine the degree of motion, since it receives essentially more or less, while all repose is equal. It is another thing when we speak of the cause of repose, which must be positive in secondary matter or mass. I should further believe that the very idea of repose is privative, that is, that it consists only in negation. It is true that the act of denying is a positive thing.

§ 10. *[Secondary qualities.]* I believe that it can be said that *power,* when it is intelligible and can be distinctly explained, ought to be counted among *primary qualities;* but when it is only sensible and gives but a confused idea, it ought to be put among *secondary qualities.*

CHAPTER IX.

Of perception.

§ 1. *[PERCEPTION the first simple idea of reflection.]* It might, perhaps, be added that brutes have perception and that it is not necessary that they have thought, that is to say, that they have reflection or what may be its object. Also we ourselves have minute *perceptions* of which we are not conscious in our present state. It is true that we could very well perceive them and reflect on them if we were not turned aside by their multitude which distracts our minds, or if they were not effaced or rather obscured by the greater ones.

§ 4. I should prefer to distinguish between *perception* and *consciousness* (*s'apercevoir*). The perception of light or of color, for example, of which we are conscious is composed of many minute perceptions of which we are not conscious; and a noise of which we have a perception but to which we do not attend, becomes apperceptible by a little addition or augmentation. For if what precedes made no impression on the soul, this small addition would also make none and the whole would make no more.

§ 8. *["The problem of Molineux."]* I think that supposing that the blind man knows that these two figures which he sees are those of the cube and of the globe, he would be able to discern them and to say without touching them, this is the globe, this is the cube.

Perhaps Molineux and the author of the *Essay* are not so far from my opinion as at first appears, and that the reasons of their opinion, contained apparently in the letter of the former who has employed it with success in order to convince people of their folly, have been suppressed purposely by the latter in order to give more exercise to the mind of his readers. If you

will weigh my answer you will find that I have put a condition in it which can be considered as comprised in the question; it is, that the only thing in question is that of distinguishing, and that the blind man knows that the two figured bodies which he must distinguish are there, and that thus each of the appearances which he sees is that of the cube or that of the globe. In this case, it seems to me beyond doubt that the blind man who ceases to be blind, can distinguish them by the principles of the reason joined to what touch has provided him with beforehand of sensible knowledge. For I do not speak of what he will do perhaps in fact and immediately, being stunned and confounded by the novelty and otherwise little accustomed to drawing consequences. The foundation of my opinion is that in the globe there are no points distinguishable on the side of the globe itself, all being there level and without angles, whereas in the cube there are eight points distinguished from all the others. If there were not this means of distinguishing the figures a blind man could not learn the rudiments of geometry by touch. Nevertheless, we see that those born blind are capable of learning geometry and have even always some rudiments of natural geometry, and that most often geometry is learned by the sight alone, without employing touch, as a paralytic, or other person to whom touch has been almost interdicted, might and even must do. And it must be that these two geometries, that of the blind man and that of the paralytic, meet and coincide and even return to the same ideas although there are no common images. This again shows how necessary it is to distinguish *images* from *exact ideas* which consist in definitions. It would certainly be very interesting and even instructive to examine well the ideas of one born blind to hear his descriptions of figures. For he might come to this and he might even understand the doctrine of optics in so far as it depends upon distinct and mathematical ideas, although he would not be able to reach a conception of what is clear-confused, that is to say, the image of light and of colors. — It would also be very important

to examine the ideas that a deaf and dumb man might have of non-figured things. — Men are very negligent in not getting an exact knowledge of the ways of thinking of such persons.

§11*[Perception puts the difference between animals and inferior beings.]* I am inclined to believe that there is also among plants some perception and desire, because of the great analogy there is between plants and animals; and if there is a vegetable soul, as is the common opinion, it must have perception. However, I do not cease to ascribe to mechanism all that takes place in the body of the plants and animals, except their first formation. Thus I agree that the movement of the plant called sensitive comes from the mechanism, and I do not approve of having recourse to the soul when the detail of the phenomena of plants and animals is to be explained.

§13. Very good; and I think almost as much could be said of plants. But as to man, his perceptions are accompanied by the power of reflection which passes to the act when there is occasion. But when he is reduced to a state in which he is like one in a lethargy and almost without feeling, reflection and consciousness cease and universal truths are not thought of. Nevertheless, the innate and acquired faculties and dispositions and even the impressions which are received in this state of confusion do not cease for that reason and are not effaced although they are forgotten; they will even have their turn in order to contribute some day toward some noticeable effect; for nothing is useless in nature; all confusion ought to develop itself, animals even, having passed through a condition of stupidity, ought to return some day to more exalted perceptions; and since simple substances last forever, it will not do to judge of eternity by some years.

CHAPTER XI.

Of the faculty of discerning ideas.

§ 10. *[BRUTES abstract not.]* I am of the same opinion. They know apparently whiteness and notice it in chalk as in snow; but this is not yet abstraction, for it requires a consideration of what is common, separated from what is particular, and consequently there enters therein the knowledge of universal truths, which is not given to brutes. It is well observed also that the brutes that speak do not make use of words to express general ideas, and that men deprived of the use of speech and of words do not fail to invent other general signs.

§ 11. The brutes pass from one imagination to another by the connection which they have felt here before; for example, when the master takes a stick the dog is apprehensive of being struck. And on many occasions children, as likewise other men, have no other procedure in passages from thought to thought. This might be called *consecution and reasoning* in a very broad sense. But I prefer to conform to the received usage in confining these words to man and in restricting them to the knowledge of some *reason* of the connection of perceptions which sensations alone could not give their effect being but to cause us naturally to expect another time the same connection which has been noticed before, although the reasons are no longer the same; a fact which often deceives those who govern themselves merely by the senses.

§ 17. *[Dark room.] [Cf. opening remarks of the next chapter.]*

CHAPTER XII.

Of complex ideas.

IN ORDER TO render the resemblance greater it would be necessary to suppose that there was in the dark room to receive the species a cloth, which was not smooth but diversified by folds representing innate knowledge; that, furthermore, this cloth or canvas being stretched had a sort of elasticity or power of acting, and even an action or reaction accommodated as much to past folds as to newly arrived impressions of the species. And this action would consist in certain vibrations or oscillations, such as are seen in a stretched cord when it is touched, of such a kind that it gives forth a sort of musical sound. For not only do we receive images or traces in the brain but we also form them anew when we consider *complex ideas.* Thus the cloth, which represents our brain, must be active and elastic. This comparison would explain tolerably well what takes place in the brain; but as to the soul, which is a simple substance or *monad*, it represents without extension these same varieties of extended masses and has perception of them.

§ 3. *[Complex ideas are either modes, substances, or relations.]*

This division of the objects of our thoughts into substances, modes and relations is satisfactory to me. I believe that the qualities are but modifications of substances, and that the understanding adds thereto the relations. This is of more consequence than is thought.

§ 5. *[Simple and mixed modes.]* Perhaps a dozen or score are but relations and are constituted by relation to the understanding. Units are separate and the understanding puts them together however dispersed they may be. Nevertheless, although relations are from the understanding they

are not without foundation and reality. For the first Understanding is the origin of things; and even the reality of all things, except simple substances, consists only in the foundation of the perceptions of the phenomena of simple substances. It is often the same thing as regards mixed modes, that is to say, that it would be necessary to refer them back to other relations.

CHAPTER XIII.

Of simple modes, and first of those of space.

§ 17. *[WHETHER space is substance or accident, not known.]* I have reason to fear that I shall be accused of vanity in wishing to determine what you, sir, acknowledge not to know. But there is room for believing that you know more on this point than you say or believe you do. Some have believed that God is the place of things. Lessius and Guerike, if I am not mistaken, were of this opinion; but then place contains something more than we attribute to space which we strip of all action; and in this way it is no more a substance than time, and if it has parts it could not be God. It is a relation, an order, not only among existing things but also among possible things as if they existed. But its truth and reality is founded in God, like all the eternal truths.

It is best then to say that space is an order, but that God is its source.

§ 19. *[Substance and accident of little use in philosophy.]* I acknowledge that I am of another opinion, and that I believe that the consideration of substance is a point of philosophy of the greatest importance and of the greatest fruitfulness.

CHAPTER XIV.

Of duration and its simple modes.

§ 16. *[It is not motion but the constant train of ideas in our minds while awake that furnishes us with the idea of duration.]* A train of perceptions awakens in us the idea of duration but it does not make it. Our perceptions never have a train sufficiently constant and regular to correspond to that of time, which is a uniform and simple *continuum,* like a straight line. The change of perceptions gives us occasion to think of time, and it is measured by uniform changes; but if there should be nothing uniform in nature, time would not cease to be determined, just as place would not cease to be determined also if there should be no fixed or immovable body.

§ 24. The void which can be conceived in time indicates, like that in space, that time and space apply as well to possible as to existing things.

§ 26. Time and space are of the nature of eternal truths which concern equally the possible and the existing.

§ 27. *[Eternity.]* But in order to derive the notion of eternity it is necessary to conceive more, viz. that the same reason subsists always for going farther. It is this consideration of the reasons which completes the notion of the infinite or of the indefinite in progresses. Thus the senses alone could not suffice to make us form these notions. And at bottom it may be said that the idea of the *Absolute* is anterior in the nature of things to *that of the limits* which are added. But we do not notice the first save in beginning with what is limited and which strikes our senses.

CHAPTER XVII.

Of infinity.

§ 1. *[INFINITY, in its original intention, attributed to space, duration and number.]* The true infinite, strictly speaking, is only in the *Absolute*, which is anterior to all composition and is not formed by the addition of parts.

§ 3. *[Hence we come by the idea of infinity.]* Take a straight line and prolong it in such a way that it is double the first. Now it is clear that the second, being perfectly similar to the first, can be doubled in the same way in order to give a third which is also similar to the preceding; and the *same reason subsisting always* it will never be possible to stop; thus the line can be prolonged *ad infinitum;* in such a way that the consideration of the infinite comes from that of the similarity or of the *same reason,* and its origin is the same as that of universal and necessary truths. This shows how what gives completion to the conception of this idea is found in us and could not come from the experiences of the senses; just as necessary truths could not be proved by induction nor by the senses. The idea of the *Absolute* is in us internally, like that of being. These absolutes are nothing but the attributes of God and it can be said that they are no less the source of the ideas than God is himself the principle of beings. The idea of the absolute in relation to space is no other than that of the immensity of God, and so of the others. But we deceive ourselves in imagining an absolute space, which would be an infinite whole, composed of parts. There is no such thing. It is a notion which involves a contradiction, and these infinite wholes and their opposites, the infinitely minutes, are only admissible in the calculations of geometers just like the imaginary roots of algebra.

§ 16. *[We home no positive idea, of infinity nor of infinite duration]* I believe that we have a positive idea of both, and this idea will be true provided it is not conceived as an infinite whole but as an absolute or attribute without limits, which is the case as regards the *eternity* in the necessity of the existence of God, without depending on parts and without forming the notion by an addition of times. From this is also seen, as I have already said, that the origin of the notion of the infinite comes from the same source as that of necessary truths.

CHAPTER XIX.

Of the modes of thinking.

§ 1. [SENSATION, remembrance, contemplation, &c.] It is well to clear up these notions and I shall try to aid in it. I will say then that it is sensation when we perceive an external object; that remembrance is its repetition without the object returning; but when we know that we have had it, it is memory. Contemplation is commonly employed in a sense different from yours, namely, for a condition where we free ourselves from business in order to apply ourselves to some meditation. But since there is no word that I know of which fits your notion, sir, the one you employ may be applied to it. We give attention to the objects which we distinguish and prefer to others. When attention continues in the mind, whether the external object continues or not, and even whether it is present or not, this is consideration; which when it concerns knowledge without reference to action will be contemplation. Attention, the aim of which is to learn (that is to say, to acquire knowledge in order to preserve it), is study. To consider in order to form some plan is to meditate; but revery appears to be nothing but the pursuing of certain thoughts through the pleasure taken in them without having other end; this is why revery may lead to insanity: one forgets self, forgets the dic cur hic, approaches dreams and chimeras, builds castles in Spain. We cannot distinguish *dreams* from sensations except because they are not connected with them; they are, as it were, a world apart. *Sleep* is a cessation of sensations, and so *trance* is a very profound sleep from which one can be aroused with difficulty, which comes from a transient internal cause which distinguishes it from the profound sleep which comes from a narcotic or from some lasting injury to the functions, as in lethargy. Trances

are sometimes accompanied by *visions;* but there are some without trance; and *vision*, it seems, is nothing but a dream which passes for a sensation, as if it taught us the truth of the objects. And when these visions are divine there is in fact truth; which may be known, for example, when they contain particularized prophecies which the event justifies.

§ 4. *[Hence it is probable that thinking is the action, not the essence of the soul.]* Undoubtedly thought is an action and could not be the essence; but it is an essential action, and all substances have such. I have shown above, that we have always an infinity of minute perceptions without our being conscious of them. We are never without *perceptions* but it is necessary that we be often without *apperceptions*, namely, when there are no distinct perceptions. It is for want of having considered this important point that a philosophy loose and as little noble as solid has prevailed among so many men of good minds, and because we have hitherto almost ignored what there is most beautiful in souls. This has also caused men to find so much plausibility in the error which teaches that souls are of a perishable nature.

CHAPTER XX.

Of modes of pleasure and pain.

§ 1. *[PLEASURE and pain, simple ideas.]* I believe that there are no perceptions which are entirely indifferent to us, but it is enough that their effect be not noticeable in order that they may be called so, for *pleasure* and *pain* appear to consist in an aid or in a noticeable impediment. I assert that this definition is not nominal and that one cannot be given.

§ 2. *[Good and evil, what.]* I am also of this opinion. The good is divided into the praiseworthy, agreeable, and useful; but at bottom I believe that it must be either itself agreeable or contributing to something else which can give us an agreeable feeling; that is to say, the good is agreeable or useful and the praiseworthy itself consists in a pleasure of the mind.

§§ 4, 5. *[Love. Hatred.]* I gave very nearly this same definition of *love* when I explained the principles of justice in the preface to my *Codex Juris Gentium Diplomaticus,* namely, that to *love* is to be led to take pleasure in the perfection, well-being or happiness of the beloved object. And for this reason we do not consider nor demand any other pleasure for self than just that which is found in the well-being or pleasure of the one loved; but in this sense we do not properly love what is incapable of pleasure or of happiness, and we enjoy things of this nature without, for that reason, loving them, if this is not by a prosopopoeia, and as if we imagine that they themselves enjoy their perfection. It is not then properly love when we say that we love a beautiful picture because of the pleasure we take in thinking of its perfections. But it is permissible to extend the meaning of the terms, and usage varies here. Philosophers and theologians even distinguish two kinds of love, namely, the *love* which they call *love of conquest*, which is

nothing else than the desire or feeling we have for what gives us pleasure without our interesting ourselves as to whether it receives pleasure; and the *love of benevolence*, which is the feeling we have for him who, by his pleasure or happiness, gives the same to us. The first causes us to have in view our pleasure and the second that of others, but as making or rather constituting ours, for if it should not react upon us in some sort we could not interest ourselves in it, since it is impossible, whatever may be said, to be indifferent to one's own good. And this is how *disinterested* or nonmercenary *love* must be understood, in order to conceive well its nobleness and yet not to fall into the chimerical.

§ 6. *[Desire].* This consideration of *uneasiness* is a capital point in which the author has particularly shown his penetrating and profound spirit. This is why I have given it some attention, and after having considered the matter well, it appears to me that the French word *inquietude (restlessness),* if it does not sufficiently express the meaning of the author, fits nevertheless, in my opinion, the nature of the thing; and the English word uneasiness, if it stands for a displeasure, fretfulness *(chagrin),* inconvenience, and in a word some effective pain, would be inappropriate. I should prefer to say that in desire in itself there is rather a disposition and preparation toward pain than pain itself. It is true that this perception sometimes does not differ from that which is in pain than as less does from more, but this is because the degree is the essence of pain, for it is a noticeable perception. This is also seen by the difference which there is between appetite and hunger; for when the irritation of the stomach becomes too strong it incommodes; so that it is necessary also to apply here our doctrine of perceptions too minute to be apperceptible; for if what takes place in us when we have an appetite and desire were sufficiently magnified it would cause us pain. This is why the infinitely wise author of our being has acted for our good, when he ordained that we should be often in

ignorance and in confused perceptions. This is in order to act more promptly by instinct and not to be incommoded by the too distinct sensations of many objects, which do not altogether come back to us, and which nature has not been able to do without in order to obtain its ends. How many insects do we not swallow without our being conscious of it? how many persons do we see who having too fine a sense of smell are thereby incommoded? and how many disgusting objects should we see if our vision were sufficiently piercing? It is also by this skill that nature has given us the incitements of desire, like the rudiments or elements of pain or, so to speak, semi-pains, or (if you wish to speak so as to express yourself more forcibly) minute inapperceptible pains, to the end that we may *enjoy the advantage of evil* without being incommoded thereby. For otherwise if this perception were too distinct we would always be miserable in waiting for the good, whereas this continual victory over these semi-pains which are felt in following one's desire and satisfying in some sort this appetite or this longing, gives us many semi-pleasures, the continuation and collection of which (as in the continuation of the impulse of a heavy body which descends and acquires force) becomes in the end an entire and real pleasure. And at bottom without these semi-pains there would be no pleasure, and there would be no means of perceiving that something, by being an obstacle which prevents us from putting ourselves at our ease, assists us and aids us. It is also in this that the affinity of pain and of pleasure is recognized, which Socrates notices in the Phaedo of Plato when the feet long to be in action. This consideration of the minute aids or small deliverances and imperceptible disengagements of the arrested tendency from which noticeable pleasure finally results, serves also to give some more distinct knowledge of the confused idea which we have and ought to have *of pleasure and of pain;* just as the feeling of heat or of light results from many minute movements which express those of the objects, as I have said

above (ch. 9, § 13), and do not differ therefrom save in appearance and because we are not conscious of this analysis; whereas many to-day believe that our ideas of sensible qualities differ *toto genere* from motions and from what takes place in the objects, and are something primitive and inexplicable, and even arbitrary, as if God made the soul feel what seems good to him in place of what takes place in the body; an opinion very far removed from the true analysis of our ideas. But to return to *uneasiness*, that is to say, to the minute imperceptible solicitations which keep us always in breath, these are confused determinations such that we often do not know what we lack, whereas in *inclinations and passions,* we at least know what we need, although the confused perceptions enter also into their manner of acting, and the same passions also cause this uneasiness or longing. These impulses are like so many small springs which try to unbend and which cause our machine to act. And I have already remarked thereon, that it is through this that we are never indifferent, when we appear to be most so, for example, to turning to the right rather than to the left at the end of a path. For the side which we take comes from these insensible determinations mingled with the actions of the objects and of the interior of the body, which cause us to find ourselves more at our ease in one than in the other way of moving ourselves. The pendulum of a clock is called in German *Unruhe,* that is to say, *uneasiness.* It can be said that it is the same in our body which can never be perfectly at its ease because if it should be so, a new impression of the objects, a slight change in the organs, in the vessels, and in the viscera would change at once the balance and would cause them to make some slight effort in order to regain the best state which they can be in; which produces a continual strife, which causes, so to speak, the *uneasiness* of our clock; so that this term is satisfactory to me.

§7. *[Joy].* There are no words in the languages sufficiently appropriate to distinguish kindred notions. Perhaps the Latin *gaudium* approaches nearer

this definition of joy than *laetitia*, which is also translated by the *word joy;* but then it seems to me to signify a state in which pleasure predominates in us, for during the profoundest sorrow and amidst the most piercing griefs one can take some pleasure, as in drinking or in listening to music, but the pain predominates; and likewise amid the sharpest pains, the mind can be in joy, as happened to the martyrs.

§ 8. *[Sorrow.]* Not only the actual presence but also the fear of an evil to come can make sad, so that I believe the definitions of joy and of sorrow, which I have just given, come nearest to usage. As to uneasiness, there is in pain, and consequently in sorrow, something more; and uneasiness is even in joy, for it makes men wide awake, active, full of hope for going farther. *Joy* has been able to cause death by excess of emotion, and then there was in it even more than uneasiness.

§§ 9, 10. *[Hope and Fear.]* If uneasiness signifies a pain, I acknowledge that it always accompanies fear; but taking it for this insensible incitement which urges us on, it can also be applied to hope. The Stoics took the passions for opinions; thus their hope was the opinion of a future good, and fear, the opinion of a future evil. But I prefer to say that the passions are neither contentments or pains, nor opinions, but tendencies or rather modifications of the tendency, which come from opinion or from feeling, and which are accompanied by pleasure or displeasure.

§ 11. *[Despair.]* Despair taken for the passion will be a sort of strong tendency which finds itself wholly arrested, causing a violent struggle and much pain. But when the despair is accompanied by repose and indolence, it will be an opinion rather than a passion.

§ 12. *[Anger.]* Anger seems to be something more simple and more general since brutes, to whom no injury has been done, are susceptible of it. There is in anger a violent effort which strives to free itself from evil. The

desire of vengeance can remain when one is cool and when one experiences hatred rather than anger.

§ 13. *[Envy.]* According to this *[Locke's]* notion, envy would be always a praiseworthy passion and always founded upon justice, at least in my opinion. But I do not know but that envy is often entertained toward recognized merit which one would not hesitate to misuse if one were master. Envy is even entertained of people who have a good which one would not care to have one's self. One would be content to see them deprived of it without thinking to profit by their spoils, and even without being able to hope it. For some goods are like pictures painted *in fresco* which can be destroyed, but which cannot be taken away.

§ 11. *[Shame.]* If men took more pains to observe the exterior movements which accompany the passions, it would be difficult to conceal them. As to shame, it is worthy of consideration that modest persons, when they are simply witnesses of an improper action, sometimes feel movements resembling those of shame.

CHAPTER XXI.

Of power and of liberty.

§ 1. *[THE IDEA of power, how got.]* If *power* corresponds to the Latin *potentia* it is opposed to *act*, and the passage from power to *act* is *change.* This is what Aristotle understands by the word *motion* when he says that *it is the act or perhaps the actuation of what is in power.* We can say then that *power* in general is the possibility of change. Now change or the act of this possibility, being action in one subject and passion in another, there will be also two powers, one passive the other active. The *active* could be called *faculty* and perhaps the *passive* could be called *capacity* or *receptivity.* It is true that active power is sometimes taken in a more perfect sense when in addition to the simple faculty there is a *tendency;* and it is thus that I employ it in my *dynamical* considerations. The word *force* might be appropriated to it in particular; and *force* would be either *entelechy* or *effort;* for *entelechy* (although Aristotle employs it so generally that it comprises also all action and all effort) appears to me more appropriate to *primitive acting forces,* and that of *effort* to *derivative forces.* There is even also a species of *passive power* more particular and more endowed with reality; it is this which is in matter when there is' not only mobility, which is the capacity or receptivity for motion, but also *resistance,* which embraces *impenetrability and inertia. Entelechies,* that is to say, primitive or substantial tendencies, when they are accompanied by perception, *are souls.*

§ 4. *[The clearest idea of active power had from spirit.]* I am thoroughly in accord with you, that the clearest idea of active power comes to us from

spirit. It is also only in things which have an analogy with spirit, that is to say, in entelechies, for matter properly only indicates passive power.

§ 8. *[Liberty.]* The term *liberty* is very ambiguous. There is liberty of right and of fact. According to that of *right* a slave is not free, a subject is not entirely free, but a poor man is as free as a rich man. *Liberty of foot* consists either in the power *to will* as one ought, or in the power to do what one wills. It is of the *liberty of doing* of which you speak, and it has its degrees and varieties. Generally he who has most means is most free to do what he wishes: but, *in particular, liberty* is understood of the use of things which are wont to be in our power and especially of the free use of our body. Thus the prison or sicknesses which prevent us from giving to our body and to our limbs the motion which we wish and which we are ordinarily able to give, lessens our liberty. It is thus that a prisoner is not free, and that a paralytic has not the free use of his limbs. *Liberty to will* is also taken in two different senses. One is when it is opposed to the imperfection or to the slavery of the spirit, which is a coaction or constraint, but internal like that which comes from the passions. The other sense appears when liberty is opposed to necessity. In the first sense the Stoics said that the wise man only is free; and in fact the spirit is not free when it is occupied with a great passion, for one cannot then will as he ought to, that is to say, with the deliberation which is requisite. It is thus that God alone is perfectly free, and that created spirits are so only in so far as they are superior to the passions. And this liberty concerns properly our understanding. But the liberty of the spirit opposed to necessity concerns the naked will and in so far as it is distinguished from the understanding. This it is which is called *free-will,* and it consists in this, that one wishes that the strongest reasons or impressions which the understanding presents to the will do not prevent the act of the will from being contingent, and do not give an absolute or so to say metaphysical necessity. And it is in this

sense that I am accustomed to say that the understanding can determine the will in accordance with the prevalence of perceptions and reasons, in such a way that even when it is certain and infallible it inclines without necessitating.

§ 13. *[Necessity, what.]* It seems to me that, properly speaking, although volitions are contingent, *necessity* ought not to be opposed to volition but to *contingency,* and that necessity ought *no* to be confounded with determination, for there is not less of connection or of determination in thoughts than in motions (to be determined being quite different from being pushed or forced with constraint). And if we do not always notice the reason which determines us, or rather by which we determine ourselves, it is because we are as little capable of being conscious of the whole extent of our spirit and of its thoughts, most often imperceptible and confused, as we are of disentangling all the mechanisms which nature makes play in the body. Thus, if by necessity is understood the certain determination of man, which a perfect knowledge of all the circumstances of what takes place within and without the man could enable a perfect mind to foresee, it is certain that thoughts being just as determined as the motions which they represent, every free act would be necessary. But the necessary must be distinguished from the contingent though determined; and not only contingent truths are not necessary, but even their connections are not always of an absolute necessity, for it must be acknowledged that there is a difference in the manner of determination between the consequences which exist in necessary matter and those which exist in contingent matter. Geometrical and metaphysical consequences necessitate, but physical and moral incline without necessitating; the physical even having something moral and voluntary in relation to God, since the laws of motion have no other necessity than that of *[the principle of]* the best. *[Now God chooses freely although he is determined to choose the best; and as bodies*

themselves do not choose (God having chosen for them), usage has settled that they be called necessary agents; to which I am not opposed, provided the necessary and the determined be not confounded, and that it be not imagined that free beings act in an indetermined manner; an error which has prevailed in certain minds and which destroys the most important truths, even this fundamental axiom, that nothing occurs without reason, without which neither the existence of God nor other great truths could be well demonstrated. As to constraint, it is well to distinguish two species of it. The one physical, as when a man is taken to prison in spite of himself, or is thrown over a precipice; the other moral, as, for example, the constraint of a greater evil, and this action, although in some manner forced, is nevertheless voluntary. One can also be forced by the consideration of a greater good, as when a man is tempted by having proposed to him a too great advantage, although this is not customarily called constraint.

§ 21. [Liberty belongs to the agent, or man.] When we reason about the liberty of the will, or about the *free will*, we do not ask if the man can do what he wishes, but if there is enough independence in his will itself. We do not ask if he has his limbs free or elbow-room, but if he has his spirit free and in what this consists. In this respect one intelligence could be more free than another, and the supreme intelligence will enjoy perfect liberty of which the creatures are not capable.

§§ 41, 42. *[All desire happiness. Happiness, what.]* I do not know whether the greatest pleasure is possible. I believe rather that it can grow *ad infinitum*; for we do not know how far our knowledge and our organs can be extended in all the eternity which awaits us. I believe then that *happiness* is a lasting pleasure; which could not be so without there being a continual progress to new pleasures. Therefore, of two persons, one of whom will go incomparably quicker and through greater pleasures than the other, each' will be happy in himself and *apart by himself*, although their happiness will

be very unequal. Happiness is then, so to speak, a road through pleasures; and pleasure is merely a step and an advancement towards happiness, the shortest which can be made according to the present impressions, but not always the best. The right road may be missed in the desire to follow the shortest, as the stone which goes straight may encounter obstacles too soon, which prevent it from advancing quite to the center of the earth. This shows that it is the reason and the will which transport us toward happiness, but that feeling and desire merely lead us to pleasure. Now, although pleasure can not receive a nominal definition, any more than light or color, it can however receive, like them, a causal definition; and I believe that at bottom *pleasure* is a feeling of perfection and *pain* a feeling of imperfection, provided it is noticeable enough to cause us to be conscious of it.

§ 47. *[The power to suspend the prosecution of any desire makes way for consideration, and in this freedom of will consists.]* The execution of our desire is suspended or arrested when this desire is not strong enough to move us, and to overcome the trouble and inconvenience of satisfying it. But when the desire is strong enough in itself to move us, if nothing prevents, it can be arrested by contrary inclinations, be it that they consist in a simple leaning which is like the element or the beginning of desire, be it that they extend to desire itself. Nevertheless as these inclinations, these leanings, and these contrary desires must be found already in the soul, it does not have them in its power, and consequently it cannot resist in a free and voluntary way where the reason can take part, if it had not also another means which is that of turning the mind elsewhere. But how can we think of doing it when there is need? for this is the point, especially if we are possessed by a strong passion. There is need, therefore, that the mind be prepared beforehand, and find itself already ready to go from thought to thought in order not to stop too long in a slippery and dangerous place.

For this, it is well to accustom one's self generally not to think except in passing of certain things, in order the better to preserve the freedom of the mind. But the best way is to accustom one's self to proceed methodically, and to attach one's self to a train of thoughts the connection of which reason and not chance (that is to say, insensible and casual impressions) establishes. And in order to do this, it is well to accustom one's self to collect one's self from time to time, and to raise one's self above the present tumult of impressions, to go forth, so to say, from the place where one is, to say to one's self "*dic cur hic? respice finem,* or where are we? or are we coming to the point?" Men would often have need of some one, established with an official title (as Philip, the father of Alexander the Great, had), to interrupt them and to recall them to their duty. But, for lack of such an officer, it is well for us ourselves to be accustomed to perform for ourselves this office. Now being once in a condition to arrest the effect of our desires and of our passions, that is to say, to suspend action, we can find the means of combating them, be it by the contrary desires or inclinations, be it by diversion, that is to say, by occupations of another nature. It is by these methods and these artifices that we become, as it were, masters of ourselves, and that we can make ourselves think and do in time what we would will to and what reason commands. Nevertheless, it is always by determined ways and never without ground or by the imaginary principle of a perfect indifference or equilibrium, in which some would make the essence of liberty to consist, as if one could determine himself groundlessly and even against all ground, and go directly counter to the *prevalence* of the impressions and the inclinations.

§ 51. *[The necessity of pursuing true happiness the foundation of liberty.]* True happiness ought always to be the object of our desires, but there is ground for doubting whether it is. For often we hardly think of it, and I have remarked here more than once that the less desire is guided by

reason the more it tends to present pleasure and not to happiness, that is to say, to lasting pleasure, although it tends to make it last. Cf. §§ 36, 41.

CHAPTER XXIII.

Of our complex ideas of substances.

§ 1. *[IDEAS of substances, how made.]* On the contrary it is rather the *concretum* as odorous, as warm, as glittering, which comes into our minds, rather than the *abstractions* or qualities (for it is they which are in the substantial object and not the ideas) as, namely, heat, light, etc. which are much more difficult to comprehend. It may even be doubted whether these accidents are real entities, as in fact they are very often only relations. It is known also that it is the abstractions which occasion most difficulty when it is desired to examine them minutely, as those know who are acquainted with the subtilties of the scholastics, whose most intricate speculations fall at one blow if we will banish abstract entities and resolve not to speak ordinarily except by concretes, and not to admit any other terms in the demonstrations of the sciences, but those which represent substantial subjects. Thus it is *nodum quærere in scirpo,* if I dare say it, and to invert things, if we take the qualities or other abstract terms for what is easiest and the concrete ones for something very difficult.

§2. *[Our idea of substance in general.]* In distinguishing two things in substance, attributes or predicates and the common subject of these predicates, it is not strange that nothing in particular can be conceived in this subject. It must necessarily be so, since we have already separated all the attributes in which some detail could be conceived. Therefore to demand something more in this pure subject in general than what is necessary in order to conceive that it is the same thing (e. g. which understands and wills, which imagines and reasons), this is to demand the impossible and to run counter to one's own supposition, made in abstracting

and in conceiving separately the subject and its qualities or accidents. The same pretended difficulty could be applied to the notion of being and to all that is most clear and most primitive; for we could ask philosophers what they conceive in conceiving pure being in general; for all detail, being thereby excluded, there would be as little to say as when it is asked what pure substance in general is. I think, therefore, that the philosophers do not deserve to be ridiculed, as is done here in comparing them to the Indian philosopher, who when asked what the earth rested on, replied that it was a large elephant, and when asked what the elephant rested on, said that it was a great tortoise, and, finally, when pressed to tell what the tortoise rested on, was reduced to saying that it was something, I know not what. However, the consideration of substance, very inconsiderable as it seems to be, is not so void and sterile as is thought. Certain consequences come from it which are most important to philosophy, and which are capable of giving it a new aspect. *[Cf. ch. 13, § 19.]*

§ 4. *[No clear idea of substance in general.]* For my part, I believe that this opinion of our ignorance comes from our demanding a kind of knowledge which the object does not permit of. The true mark of a clear and distinct notion of an object is the means we have of knowing many truths of it by à *priori* proofs, as I have pointed out in an essay on truths and ideas inserted in the *Acta* of Leipsic of the year 1684. *[Cf. ART. III.]*

§ 15. *[Ideas of spiritual substances, as clear as of bodily sub stances.]* It is well said, and it is very true, that the existence of the mind is *more certain* than that of sensible objects.

CHAPTER XXV.

Of relation.

§ 1. *[RELATION, what.]* Relations and orders are like *entities of reason,* although they have their foundation in things; for it may be said that their reality, like that of eternal truths and possibilities, comes from the supreme reason.

CHAPTER XXVII.

Of identity and diversity.

§ 1. *[WHEREIN identity consists.]* There must always be, in addition to the difference of time and of place, an internal *principle* of *distinction;* and although there are many things of the same species, it is nevertheless true there are never any perfectly similar: thus although time and place (that is, the relation to the external) serve us in distinguishing things which we do not well distinguish through themselves, things are none the less distinguishable in themselves. The characteristic of *identity* and of *diversity* does not consist, therefore, in time and in place.

§ 3. *[Principium individuation is.] The principle of individuation* corresponds in individuals to the principle of distinction of which I have just spoken. If two individuals were perfectly similar and equal, and (in a word) *indistinguishable* in themselves, there would be no principle of individuation; and I even venture to say that there would be no individual distinction, or different individuals, on this condition.

§ 9. *[Personal identity.]* I am also of the opinion that consciousness, or the feeling of the *ego,* proves a moral or personal identity. And it is in this that I distinguish the *unceasingness* of the soul of a brute from the *immortality* of the soul of man: both retain *physical and real identity;* but as for man, it is conformed to the rules of divine providence that the soul preserve in addition moral identity which belongs to us in order to constitute the same person, capable consequently of feeling punishments and recompenses. It appears that you, sir, hold that this apparent identity might be preserved, even if there should be no real identity. I should believe that this might perhaps be possible by the absolute power of God; but

according to the order of things the identity apparent to the person himself, who feels himself the same, supposes the real identity at each *following stage*, accompanied by reflection or by the feeling of the ego, an intimate and immediate perception not being able to deceive naturally. If man could be only a machine and have in addition consciousness, it would be necessary to be of your opinion, sir; but I hold that this case is not possible, at least naturally. I do not mean to say either that *personal identity* and even the *ego* do not remain in us, and that I am not that *ego* which was in the cradle, under the pretext that I no longer remember anything winch I then did. It is sufficient in order to find moral identity by itself that there be a *common bond of consciousness* from a neighboring state, or even one a little removed, to another, even if some leap or forgotten interval should be mingled with it. Thus, if an illness had caused an interruption of the continuity of the connection of consciousness so that I should not know how I had come into the present state, although I might remember more distant things, the testimony of others might fill the gap of my remembrance. I might even be punished on this testimony if I had done some evil of deliberate forethought in an interval which I had forgotten a little while afterwards through this illness. And if I came to forget all past things, so that I should be obliged to let myself be taught anew, even to my name and to reading and writing, I could always learn from others my past life in my preceding state, as I have preserved my rights without its being necessary to divide myself into two persons, and to make myself my own heir. All this suffices for maintaining the moral identity which makes the same person. It is true that if others conspired to deceive me (as I might even be deceived by myself, by some vision, dream or illness, believing that what I dreamed had happened to me), the appearance would be false; but there are cases in which we may be morally certain of the truth upon the report of others; and in relation to God whose bond of union with us makes

the principal point of morality, error cannot enter. As regards the *ego,* it will be well to distinguish it from the *appearance of the ego* and from consciousness. The *ego* forms the real and physical identity, and the *appearance of the ego*, accompanied by truth, joins to it personal identity. Thus not wishing to say that personal identity does not extend farther than memory, I would say still less that the *ego* or physical identity depends on it. The real and personal identity is proved as certainly as is possible in matter of fact, by present and immediate reflection; it is proved sufficiently for common use by our remembrance of the interval, or by the corroborating testimony of others. ‘But if God changed extraordinarily real identity, personal identity would remain, provided that man should preserve the appearances of identity, as well the internal (that is of consciousness) as the external, like those appearances which consist in what is evident to others. Thus consciousness is not the only means of establishing personal identity, and the report of others or even other marks may take its place. But there is difficulty if contradiction is found between these different evidences. Consciousness may be silent as in forgetfulness; but if it said very distinctly things which were contrary to the other evidences, we should be embarrassed in the decision and sometimes as if suspended between two possibilities: that of the error of our memory and that of some deception in the external evidences.

§ 14. An immaterial being or a spirit *cannot be despoiled* of all perception of its past existence. There remain to it impressions of everything which has formerly happened to it and it has even presentiments of everything which will happen to it; but these feelings are most often too slight to be distinguishable and for us to be conscious of them, although they may be developed some day. This continuation and connection of *perceptions* forms the same individual really; but *apperceptions* (that is, when we are conscious of past feelings) prove, farther, a moral identity and

make the real identity appear — The late M. Van Helmont, the younger, believed, with certain rabbis, in the passing of the soul of Adam into the Messiah as into the new Adam. And I do not know whether he did not believe that he himself had been one of the ancients, very able man as he was otherwise. Now, if this passing of souls was true, at least in the possible way which I have explained above (but which does not appear probable), that is, that souls, retaining subtile bodies should pass suddenly into other gross bodies, the same individual would subsist always, in Nestor, in Socrates, and in some modern, and he might even make known his identity to that one who should sufficiently penetrate into his nature, by reason of the impressions or characters which would there remain of all that Nestor or Socrates has done, and which some sufficiently penetrating genius might read there. However, if the modern man had no internal or external means of knowing what he has been, it would be, so far as ethics is concerned, as if he had not been at all. But the probability is that nothing is neglected in the world, even in relation to morals, because God is its monarch, and his government is perfect. — Thus if souls passed into a new body gross or sensitive, they would always retain the expression of all of which they have had perception in the old, and it would even be necessary that the new body should feel it all so that the individual continuation will always leave its real marks.

§18. *[Object of reward and punishment.]* I confess that if God caused consciousnesses to be transferred to other souls, it would be necessary to treat them, according to ethical ideas, as if they were the same; but this would be to disturb the order of things groundlessly, and to make a divorce between the apperceptible and truth, which is preserved by insensible perceptions. This would not be rational because perceptions, at present insensible, may be developed some day, for there is nothing useless, and eternity presents a large field for changes.

§ 29. *[Continued existence makes identity.]* I have pointed out to you the source of true physical identity; I have shown you that morals do not contradict it, any more than memory; that they could not always mark out physical identity to the person himself in question, nor to those who are in communication with him; but that nevertheless they never contradict physical identity, and never are divorced from it; that there are always created spirits which know or may know what is the truth respecting it; but that there is reason for thinking that what is indifferent as regards persons themselves can he so only for a time.

CHAPTER XXVIII.

Of other relations.

§ 5. *[MORAL good and evil.]* I should prefer, for myself, to take as the measure of moral good and of virtue the invariable rule of reason that God has charged himself to maintain. Also we may he assured that by his means every moral good becomes physical, or, as the ancients said, all that is praiseworthy is useful; whereas, in order to express the idea of the author, it would be necessary to say that moral good or evil is a *good* or *evil* of imposition or institutive, which he who has the power in his hand tries to bring about or to prevent by pains or recompenses. Good is that which by the general institution of God is conformed to nature or to reason.

CHAPTER XXIX.

Of clear and obscure, distinct and confused ideas.

§ 2. In a short essay on ideas, true or false, clear or obscure, distinct or confused, inserted in the *Acta* of Leipsic in the year 1684, I have given a definition of *dear ideas* which is common to simples and compounds, and which accounts for what is said thereon here.

§ 13. *[Complex ideas may be distinct in one part and confused in another.]* This example *[a chiliagon]* shows that idea is here confounded with image. If someone proposes to me a regular polygon, sight and imagination could not make me understand the thousand sides which are in it; I have only a confused idea both of the figure and of its number, until I distinguish the number by counting. But having found it, I know very well the nature and the properties of the proposed polygon, in so far as they are those of a chiliagon, and consequently I have the idea of it; but I could not have the image of a chiliagon, and it would be necessary to have the senses and the imagination more delicate and better exercised in order to thereby distinguish it from a polygon which should have one side less. But knowledge of figures does not depend upon the imagination any more than that of numbers, although it is of use thereto; and a mathematician may know exactly the nature of an enneagon or of a decagon because he has the means of making and examining them, although he cannot distinguish them by sight. It is true then that a workman or an engineer, who should not perhaps know the nature of the figures sufficiently, might, have this advantage over a great geometrician, that he could distinguish them by merely seeing them without measuring them; as there are porters who will tell the weight of what they are to carry without the mistake of a pound, in

which they will surpass the most skillful statistician in the world. This empirical knowledge, acquired by long practice, may have great advantage for acting promptly, as an engineer very often needs to do by reason of the danger to which he exposes himself by hesitating. However this *clear image*, or this feeling which we may have of a regular decagon or of a weight of ninety-nine pounds, consists only in a *confused idea,* since it is of no use in discovering the nature and the properties of this weight or of the regular decagon, which requires a *distinct idea.* And this example serves to show better the difference between ideas, or rather that between idea and image.

§ 15. *[Instance in eternity]* This example does not seem to me to fit your purpose any better: but it is very appropriate to mine, which is to disabuse you of your notions on this point. For there reigns here the same confusion between image and idea. We have a complete and proper idea of eternity, since we have a definition of it, although we have no image of it; but the idea of infinites is not formed by the composition of parts, and the errors which are committed in reasoning concerning the infinite do not come from the lack of image.

BOOK IV.

CHAPTER I.

Of Knowledge in general.

§§ 1 AND 2. *[1. Our knowledge conversant about our ideas. 2. Knowledge is the perception of the agreement or disagreement of two ideas.]* Knowledge is employed still move generally, in such a way that it is found also in ideas or terms, before we come to propositions or truths. And it may he said that he who shall have seen attentively more pictures of plants and of animals, more figures of machines, more descriptions or representations of houses or of fortresses, who shall have read more ingenious romances, heard more curious narratives, he, I say, will have more knowledge than another, even if there should not be a word of truth in all which has been portrayed or related to him; for the practice which he has in representing to himself mentally many express and actual conceptions or ideas, renders him more tit to conceive what is proposed to him; and it is certain that he will be better instructed and more capable than another, who has neither seen nor read nor heard anything, provided that in these stories and representations he does not take for true that which is not true, and that these impressions do not hinder him otherwise from distinguishing the real from the imaginary, or the existing from the possible.... But taking knowledge in a narrower meaning, that is, for knowledge of truth, as you do here, sir, I say that it is very true that truth is always founded in the agreement or disagreement of ideas, but it is not true generally that our knowledge of truth is a perception of this agreement or disagreement. For when we know truth only empirically, from having experienced it without knowing the connection of things and the reason which there is in what we have experienced, we have no perception of this agreement or

disagreement, unless it be meant that we feel it confusedly without being conscious of it. But your examples, it seems, show that you always require a knowledge in which one is conscious of connection or of opposition, and this is what cannot be conceded to you.

CHAPTER II.

Of the degrees of our knowledge.

§ 1. *[INTUITIVE.] Primitive* truths, which are known by *intuition* are of two kinds, like the *derivative.* They are either truths of *reason,* or truths of *fact.* Truths of reason are necessary and those of fact are contingent. Primitive truths of *reason* are those which I call by the general name of *identical,* because it seems that they do nothing but repeat the same thing without giving us any information. They are affirmative or negative....

As respects primitive truths of fact, they are the immediate internal experiences of an immediateness of feeling. And here it is that the first truth of the Cartesians or of St. Augustine: I think, hence I am, that is, I am a thing which thinks, holds good. But it should be known that just as the identicals are general or particular, and that the one class is as clear as the other (since it is just as clear to say that A is A, as to say that a thing is what it *is),* so it is also with first truths of fact. For not only is it clear to me immediately that *I think;* but it is just as clear to me that *I have different thoughts;* that sometimes *I think of A,* and that sometimes *I think of B,* etc. Thus the Cartesian principle is good, but it is not the only one of its kind. You see therefore that all *primitive truths* of reason pr of fact have this in common, that they cannot be proved by anything more certain.

§ 14. *[Sensitive knowledge of particular existence.]* But let us come to this controversy which the sceptics carry on with the dogmatists over the existence of things outside of us. We have already touched upon it, but it is necessary to return to it here. I have formerly discussed it thoroughly both verbally and in writing, with the late Abbé Foucher, Canon of Dijon, a learned and subtle man. — Now I made him admit that the truth of sensible

things consisted only in the connection of phenomena, which must have its reason, and that it is this which distinguishes them from dreams; but that the truth of our existence and of the cause of phenomena is of another kind, because it establishes substances; and that the sceptics spoiled whatever they say that is good, by carrying it too far, and by wishing even to extend their doubts to immediate experiences and to geometrical truths (a thing which M. Foucher, however did not do), and to the other truths of reason, which he did a little too much. But to return to ourselves, sir; you are right in saying that there is ordinarily a difference between feelings and imaginations; but the sceptics will say that more or less does not change the kind. Besides, although feelings are wont to be more vivid than imaginations, it is a fact nevertheless that there are cases where an imaginative person is impressed by his imaginations as much or perhaps more than another is by the truth of things; so that I believe that the true criterion as regards the objects of the senses is the connection of phenomena, that is, the connection of that which takes place in different places and times, and in the experience of different men, who are themselves, each to the others, very important phenomena on this score. And the connection of phenomena, which guarantees truths of fact in respect to sensible things outside of us, is verified by means of truths of reason as the appearances of optics are explained by geometry. However it must be confessed that all this certainty is not of the highest degree, as you have well recognized. For it is not impossible, speaking metaphysically, that there may be a dream, continuous and lasting, like the life of a man; but it is a thing as contrary to reason as would be the fiction of a book which should be formed at haphazard by throwing the type together pell mell. For the rest, it is also true that, provided the phenomena he connected, it does not matter whether they are called dreams or not, since experience shows that

we are not deceived in the measures taken concerning phenomena when they are understood according to the truths of reason

CHAPTER III.

Of the extent of human knowledge.

§ 6. *["WHETHER any mere material being thinks or no."]* In the first place, I declare to you, sir, that when one has only confused ideas of *thought* and of *matter*, as one ordinarily has, it is not to be wondered at if one does not see the means of solving such questions. It is as I have remarked before that a person who has not ideas of the angles of a triangle except in the way in which one has them generally, will never think of finding out that they are always equal to two right angles. It must be considered that *matter*, taken for a *complete being* (that is, *secondary matter* opposed to *primary*, which is something simply passive and consequently incomplete), is only a mass, or that which results therefrom, and that every *real mass* supposes *simple substances* or *real unities;* and when we consider farther what belongs to the nature of these real unities, that is, *perception* and its consequences, we are transported, so to speak, into another world, that is to say, into the *intelligible world of substances*, whereas before we have been only among the *phenomena of the senses.* And this knowledge of the interior of matter shows sufficiently of what it is naturally capable, and that every time that God shall give organs fitted to express reasoning, the immaterial substance which reasons will not fail to be also given to it, by virtue of this harmony, which is again a natural result of substances. Matter could not subsist without immaterial substances, that is, without unities; after which it ought no longer to be asked whether God is at liberty to give them to it or not. And if these substances did not have in themselves the correspondence or harmony, of which I have just spoken, God would not act according to the natural order. To speak very simply of *giving* or of

according powers is to return to the *naked faculties* of the schoolmen and to imagine minute subsisting beings, which can enter and depart like the pigeons of a pigeon-house. It is making substances of them without thinking of it. The *primitive powers* constitute substances themselves; and the *derivative* powers, or, if you like, the faculties are only *modes of being* which must be derived from substances, and they are not derived from matter as a machine merely, that is, in so far as we consider it abstractly only as the *incomplete being* of primary matter, or the simply passive. Here I think that you will agree with me, sir, that it is not in the power of a mere mechanism to cause perception, sensation, reason, to arise. They must therefore spring from some other substantial thing. To think that God acts differently and gives to things accidents which are not *modes of being* or modifications derived from substances, is to resort to miracles and to what the schoolmen called the *obediential power*, by a sort of supernatural exaltation, as when certain theologians claim that the fire of hell burns separated souls; in which case it might be even doubted if it were the fire which acted, and if God did not himself produce the effect, by acting in place of the fire —

The difficulty which remains is only in respect to those who wish to *imagine* what is only intelligible, as if they wanted to see sounds, or hear colors.

CHAPTER IV.

Of the reality of human knowledge.

§§ 1-5. *[KNOWLEDGE placed in ideas may be all bare vision.Answer.]* Our certainty would be slight or rather none, if it had no other foundation for simple ideas than that which comes from the senses. Have you forgotten, sir, how I showed that ideas are originally in our mind and that even our thoughts come to us from our own depths, without its being possible for other creatures to have an immediate influence upon the soul. Moreover the ground of our certainty in regard to the universal and eternal truths lies in the ideas themselves independently of the senses; as also pure and intelligible ideas do not depend upon the senses, for example, that of being, of one, of the same, etc. But the ideas of sensible qualities, as of color, of flavor, etc. (which in reality are only appearances), come to us from the senses, that is, from our confused perceptions. And the ground of the truth of contingent and particular things is in the succession, whereby the phenomena of the senses are connected just as the intelligible truths require. This is the difference which should be made between them; whereas that which you make here between simple and compound ideas, and compound ideas belonging to substances and to accidents, does not seem to me well founded, since all intelligible ideas have their archetypes in the eternal possibility of things.

CHAPTER V.

Of truth in general.

§§ 1 AND 2. [1. What truth is. 2. A right joining or separating of signs; i. e. ideas or words.] But what I find least to my taste in your definition of truth, is that truth is there sought in words. Thus the same meaning, being expressed in Latin, German, English, French, will not be the same truth, and it will be necessary to say with Hobbes, that truth depends on the good pleasure of men which is speaking in a very strange way. Truth is even attributed to God, who you will admit (I think) has no need of signs. Finally, I have been already more than once surprised at the humor of your friends, who take pleasure in making essences and species, *nominal* truths.

We shall have therefore, farther, *literal truths*, which may be distinguished into truths of paper or of parchment, of the black of ordinary ink, or of printer's ink, if truths must be distinguished by signs. It is better, therefore, to place truths in the relation between the *objects* of ideas, which causes one to be included or not to be included in the other. This does not depend on languages and is common to us with God and the angels; and when God manifests a truth to us we acquire that one which is in his understanding, for although there is an infinite difference between his ideas and ours as respects perfection and extension, it is always true that there is agreement in the same relation. It is therefore in this *relation* that truth must be placed, and we may distinguish between *truths,* which are independent of our good pleasure, and *expressions,* which we invent as seems good to us.

§11. *[Moral and metaphysical truth]*. *Moral* truth is called *veracity* by some, and *metaphysical truth* is taken commonly by metaphysicians for an

attribute of being, but it is a very useless attribute and one almost void of meaning. Let us content ourselves with seeking truth in the correspondence of propositions which are in the mind with the things in question. It is true that I have also attributed truth to ideas in saying that ideas are true or false; but in that case I understand it in fact of the propositions which affirm the possibility of the object of the idea. And in this same sense it may be said farther that a *being is true,* that is to say, the proposition which affirms its actual or at least possible existence.

CHAPTER VII.

Of maxims.

§ 1. *[THEY are self-evident]* This investigation is very useful and even important. But you must not imagine, sir, that it has been entirely neglected. You will find in a hundred places that the scholastic philosophers have said that these propositions are evident *ex terminis,* as soon as their terms are understood; so that they were persuaded that the force of conviction was founded on the apprehension of the terms, that is, in the connection of the ideas. But the geometricians have done much more: for they have undertaken very often to demonstrate them — As regards *maxims,* they are sometimes taken for established propositions, whether they are evident or not. This might be well for beginners, whom scrupulousness arrests; but when the establishing of science is in question, it is another matter. They are also often taken thus in ethics and even by the logicians in their *Topics,* in which there is an abundance of them, but a part of this contains some which are sufficiently vague and obscure. For the rest, I said publicly and privately a long while ago that it would be important to demonstrate all the secondary axioms of which we ordinarily make use, by reducing them to primitive or immediate and undemonstrable axioms, which are those which I called lately and elsewhere, *identical* ones.

§ 7. It may always be said that this proposition, *I exist,* is most evident, being a proposition which cannot be proved by any other, or an *immediate truth.* And to say, *I think therefore I am,* is not properly to prove existence by thought, since to think and to be thinking are the same thing; and to say; I *am thinking* is the same as to say, *I am.* Nevertheless you may exclude this proposition from the number of axioms with some justice, for it is a

proposition of fact, founded upon an immediate experience, and it is not a necessary proposition, whose necessity is seen in the immediate agreement of ideas. On the contrary, there is no one but God who sees how these two terms I and *existence* are connected, that is, why I exist. But if the axiom is taken more generally for an immediate or *nomprovable* truth, it may be said that the proposition I *am* is an axiom, and in any case we may be assured that it is a *primitive truth* or *unum ex primis cognitis inter terminos complexos,* that is, that it is one of the first known statements, that which is understood in the natural order of our knowledge; for it is possible that a man may never have thought of forming expressly this proposition, which is yet innate in him.

§§ 8, 9. I had further added that in the natural order to say that a thing is what it is, is prior to saying that it is not another; for here it is not a question of the history of our discoveries, which is different in different men, but of the connection and natural order of truths, which is always the same. But your remark, namely, that what the child sees is only a fact, deserves still more reflection; for the experiences of the senses do not give absolutely certain truths (as you yourself observed, sir, not long ago), nor such as are free from all danger of illusion. For if it is permitted to make metaphysically possible fictions, sugar might be changed imperceptibly into a rod to punish a child if it has been naughty, just as water is changed into wine with us on Christmas Eve, if it has been well rectified *[morigrné],* But the pain (you will say) which the rod inflicts will never be the pleasure which the sugar gives. I reply that the child will think of making an express proposition concerning it as little as of remarking the axiom that it cannot be said truly that *what is, at the same time is not,* although it may very well perceive the difference between pleasure and pain, as well as the difference between perceiving and not perceiving.

§ 10. Thus you must not here oppose the axiom and the example as different truths in this respect, but regard the axiom as incorporated in the example and rendering the example true. It is quite another thing when the evidence is not remarked in the example itself and when the affirmation of the example is a consequence and not merely a *subsumption* of the universal proposition, as may happen also in respect to axioms.

CHAPTER IX.

Of our knowledge of existence.

§§ 2 AND 3. *[2. A threefold knowledge of existence. 3. Our knowledge of our mon existence is intuitive.]* I am fully in accord with all this. And I add that the immediate apperception of our existence and of our thoughts furnishes us the first truths *a posteriori* or of fact, that is, the *first experiences*; as identical propositions contain the first truths *a priori* or of reason, that is, the *first lights.* Both are incapable of being proved and may be called *immediate;* the former, because there is immediation between the understanding and its object, the latter, because there is immediation between the subject and predicate.

CHAPTER X.

Of our knowledge of the existence of a God.

§ 1. I do not wish to repeat what has been discussed between us concerning innate ideas and truths, among which I reckon the idea of God and the truth of his existence.

§§2-6. *[2. Man knows that he himself is. 3. He knows also that nothing cannot produce a being, therefore something is eternal. 4. That eternal being must be most powerful. 5. And most knowing. 6. And therefore God.]* I assure you, sir, with perfect sincerity, that I am extremely sorry to be obliged to say anything against this demonstration: but I do it in order to give you an opportunity to fill up the gap in it. It is principally in the passage where you conclude (§ 3) that something has existed from all eternity. I find ambiguity in it. If it means that *there has never been a time when nothing existed*, I agree to this; and it follows truly from the preceding propositions by a wholly mathematical sequence. For if there never had been anything, there would always have been nothing, nothing not being able to produce being; hence we ourselves would not be, which is contrary to the first truth of experience. But what follows shows first that in saying that something has existed from all eternity, you mean an eternal thing. Nevertheless it does not follow, in virtue of what you have advanced up to this time, that if there has always been something, it has always been a certain thing, that is, that there is an eternal being. For some opponents will say that I myself have been produced by other things and these things again by others. Farther, if some admit eternal beings (as the Epicureans their atoms) they will not believe themselves thereby obliged to grant an eternal being which should be alone the source of all others. For even if they

should admit that that which gives existence gives also the other qualities and powers of a thing, they will deny that a single thing gives existence to the others and they will even say that for each thing several others must concur. Thus we will not arrive in this way alone at one source of all powers. However it is very reasonable to conclude that there is one, and even that the universe is governed with wisdom. But if one believes matter susceptible of feeling, one may be disposed to believe that it is not impossible that it may produce it. At least it will be difficult to bring forward a proof of it which should not show at the same time that matter is altogether incapable of it; and supposing that our thought comes from a thinking being, can it be taken for granted without having a bias for the demonstration, that this must be God?

§ 7. *[Our idea of a most perfect being, not the sole proof of a God]*. Although I hold to innate ideas and particularly to that of God, I do not believe that the demonstrations of the Cartesians drawn from the idea of God, are perfect — This *[ontological argument]* is not a paralogism, but it is an imperfect demonstration which supposes something which has still to be proved in order to render it mathematically evident. This is, that it is tacitly supposed that this idea of the all-great or all-perfect being is possible and implies no contradiction — The other argument of M. Descartes which undertakes to prove the existence of God because his idea is in our soul and it must have come from the original, is still less conclusive. For, in the first place, this argument has this defect in common with the preceding, that it supposes that there is in us such an idea, that is, that God is possible — And, secondly, this same argument does not sufficiently prove that the idea of God, if we have it, must come from the original. But I do not wish to delay here at present. You will say to me, sir, that recognizing in us the innate idea of God I ought not to say that we may question whether there is one. But I permit this doubt only in relation to a strict demonstration,

founded upon the idea alone. For one is sufficiently assured otherwise of the idea and of the existence of God. And you will remember that I have shown how ideas are in us, not always in such a way that we are conscious of them, but always so that we may draw them from our own depths and render them perceptible. And this is also what I believe of the idea of God, whose possibility and existence I hold to be demonstrated in more than one way. And the *Preestablished Harmony* itself furnishes a new and incontestable means of doing so. I believe besides that almost all the means which have been employed to prove the existence of God are good, and might serve, if they were perfected; and I am not at all of the opinion that the one which is drawn from the order of things is to be neglected.

§§ 9, 10. *[9. Two sorts of beings, cogitative and incogitative.*

10. Incogitative being cannot produce a cogitative]. I think the present reasoning the strongest in the world, and not only exact but also profound and worthy of its author. I am entirely of his opinion that there is no combination and modification of parts of matter, however small they may be, which can produce perception; all the more that the gross parts could not give it (as is clearly evident), and that everything in the small parts is proportional to what may take place in the large ones. It is another important remark upon matter, which the author here makes, that it must not be taken for a thing single in number, or (as I am accustomed to say) for a true and perfect *monad* or *unity,* since it is but a *mass* of an infinite number of beings. Here this excellent author needed but one more step to reach my system. For in fact I give perception to all these infinite beings, each one of which is as an animal, endowed with a soul (or with some analogous active principle, which forms its true unity) together with what is necessary to this being in order to be passive, and endowed with an organic body. How these beings have received their nature, active and passive (that is, what they possess of immaterial and material), from a general and supreme cause,

because otherwise, as the author well remarks, being independent each of the others, they could never produce that *order,* that *harmony,* that *beauty,* which we observe in nature. But this argument, which appears to be only of moral certainty, is brought to a necessity altogether metaphysical by the *new hind of harmony* which I have introduced, which is the *preestablished harmony.* For each one of these souls expressing in its manner that which takes place outside and not being able to have any influence on other particular beings, or rather, being obliged to draw this expression from the depths of its own nature, each one must necessarily have received this nature (or this internal reason of the expressions of what is external) from a universal cause on which all these beings depend, and which causes one to be perfectly in accord and correspondent with another; a thing which is not possible without an infinite knowledge and power, and by an artifice great in respect especially to the spontaneous agreement of the mechanism with the actions of the rational soul. In regard to this, the illustrious author who made objections against it in his wonderful Dictionary, doubted whether it did not surpass all possible wisdom; saying that the wisdom of God did not appear to him too great for such an effect, and he at least recognized that never had the feeble conceptions which we are able to have of the divine perfection, been so set in relief.

CHAPTER XI.

Of our knowledge of the existence of other things.

§§ 1-10. *[It is to be had only by sensation, etc.]* I have already remarked in our preceding conversations that the truth of sensible things is proved by their *connection,* which depends on the intellectual truths founded in reason, and on the constant observations in sensible things themselves, even when the reasons do not appear. And as these reasons and observations give us the means of judging of the future by relation to our interests, and as success answers to our rational judgment, we could not ask nor even have a greater certainty concerning these objects. We can account also even for dreams and for their lack of connection with other phenomena. Nevertheless I believe that the appellation of knowledge and of certainty might be extended beyond actual sensations, since clearness and manifestness extend beyond, which I consider as a kind of certainty: and it would undoubtedly be folly to seriously doubt whether there are men in the world when we do not see any. *To doubt seriously* is to doubt in relation to practice, and *certainty* might be taken for a knowledge of truth of which one cannot doubt in relation to practice without madness; and sometimes it is taken still more generally and applied to cases where we cannot doubt without deserving to be greatly blamed. But *manifestness* would be a luminous certainty, that is to say, where we do not doubt on account of the connection which we see between ideas. According to this definition of certainty, we are certain that Constantinople is in the world, that Constantine and Alexander the Great and Julius Cæsar have lived. It is true that some peasant of Ardennes might with reason doubt of these for want of

information; but a man of letters and of the world could not do so without a great derangement of mind.

§ 11. *[Past existence known by memory.]* It has already been remarked that our memory sometimes deceives us. And we believe it or not according as it is more or less vivid and more or less connected with the things which we know. And even when we are assured of the principal fact we may often question the circumstances.

§§ 13, 14. *[13. Particular propositions concerning existence are knowable. 14. And general propositions concerning abstract ideas.]* Your division appears to amount to mine, of *propositions of fact* and *propositions of reason.* Propositions of fact also may become general in a way, but it is by induction or observation; so that it is only a multitude of similar facts, as when it is observed that all quicksilver is evaporated by the force of fire; and this is not a perfect generalization because we do not see its necessity. General propositions of reason are necessary, although the reason also furnishes some which are not absolutely general and are only probable, as, for example, when we presume that an idea is possible until the contrary is discovered by a more exact research. There are, finally, *mixed propositions* which are drawn from premises, some of which come from facts and observations, and others are necessary propositions: and such are a number of geographical and astronomical conclusions concerning the globe of the earth and the course of the stars, which spring from the combination of the observations of travelers and astronomers with the theorems of geometry and arithmetic. But as, according to the usage of logicians, *the conclusion follows the weakest of the premises* and cannot have more certainty than they, these mixed propositions have only the certainty and universality which belong to the observations. As regards *eternal truths*, it must be observed that at bottom they are all conditional and say in effect, such a thing posited, such another thing is. For example, in saying, *every figure*

which has three sides will also have three angles, I do nothing but suppose that if there is a figure with three sides, *this same figure* will have three angles....

The scholastics have disputed hotly *de constantia subjecti,* as they called it, that is, how the proposition made upon a subject can have a real truth if this subject does not exist. It is that the truth is only conditional and says that in case the subject ever exists, it will be found such. But it will be asked further, in what is this connection founded, since there is in it reality which does not deceive? The reply will be that it is in the connection of ideas. But in answer it will be asked, where would these ideas be if no mind existed and then what would become of the real foundation of this certainty of the eternal truths? This leads us finally to the ultimate ground of truths, namely, to that *Supreme and Universal Mind*, which cannot fail to exist, whose understanding, to speak truly, is the region of eternal truths, as St. Augustine has recognized and expresses in a sufficiently vivid way. And in order that it be not thought that it is unnecessary to resort to this, we must consider that these necessary truths contain the determining reason and the regulative principle of even existences, and, in a word, the laws of the universe. Thus these necessary truths, being anterior to the existences of contingent beings, it must be that they are founded in the existence of a necessary substance. Here it is that I find the original of the ideas and truths which are engraved in our souls, not in the form of propositions, but as the sources from which applications and occasions will cause actual enunciations to arise.

CHAPTER XII.

Of the improvement of our knowledge.

§§4-6. *[DANGEROUS TO build upon precarious principles. But to compare dear complete ideas under steady names.]* I am surprised, sir, that you turn against maxims, that is, against evident principles, that which can and must be said against the principles supposed *gratis.* When one demands *praecognita* in the sciences, or anterior knowledges, which serve to ground science, he demands *known principles* and not arbitrary positions, the truth of which is not known; and even Aristotle understands that the inferior and subaltern sciences borrow their principles from other higher sciences where they have been demonstrated, except the first of the sciences, which we call metaphysics, which, according to him, asks nothing from the others and furnishes them the principles of which they have need; and when he says δει πιστευειν τον μανθανοντα, the apprentice must believe his master, his opinion is that he must do it only while waiting, while he is not yet instructed in the higher sciences, so that it is only provisionally. Thus one is very far from receiving *gratuitous principles.* To this must he added, that even principles whose certainty is not complete may have their use if we build upon them only by demonstration; for although all the conclusions in this case are only conditional and are valid solely on the supposition that this principle is true, nevertheless, this connection itself and these conditional enunciations would at least be demonstrated; so that it were much to be desired that we had many books written in this way, where there would be no danger of error, the reader or disciple being warned of the condition. And practice will not be regulated by these conclusions except as the supposition shall be found verified otherwise. This method also serves

very often itself to verify suppositions or hypotheses, when many conclusions arise from them, the truth of which is known otherwise, and sometimes this gives a perfect proof sufficient to demonstrate the truth of the hypothesis.

§ 13. *[The true use of hypotheses.]* The art of discovering the causes of phenomena, or true hypotheses, is like the art of deciphering, where an ingenious conjecture often shortens the road very much. Lord Bacon began to put the art of experimenting into precepts, and Sir Robert Boyle had a great talent for practising it. But if the art of employing experiences and of drawing consequences therefrom is not joined to it, we shall never with the utmost cost attain to what a man of great penetration might discover in the first place. Descartes, who was assuredly such, has made a similar remark, in one of his letters, in regard to the method of the Chancellor of England; and Spinoza (whom I do not hesitate to quote when he says something good), in one of his letters to the late M. Oldenbourg, Secretary of the Royal Society of England, printed among the posthumous works of this subtle Jew, makes a like reflection concerning a work by Mr. Boyle, who, to speak the truth, stops a little too much to draw from a number of fine experiences no other conclusion than this which he might take for a principle, namely, that everything takes place in nature mechanically; a principle which can be rendered certain by reason alone and never by experiences however numerous they may be.

Theodicy (1710)

Original Title: 'Essais de Théodicée sur la bonté de Dieu, la liberté de l'homme et l'origine du mal'

Translated by E. M. Huggard, 1890

Originally titled 'Essays of Theodicy on the Goodness of God, the Freedom of Man and the Origin of Evil', this book is widely considered Leibniz' most important work and was in fact the only book he published during his lifetime. First published in 1710, it introduced the term 'theodicy'. Its optimistic approach to the problem of evil is thought to have inspired Voltaire's satirical attack in *Candide*. In the philosophy of religion, a theodicy means a 'vindication of God', from Ancient Greek θεός "god" and δίκη "justice". Leibniz' argument attempts to resolve the problem of evil that arises when all power and all goodness are simultaneously ascribed to God. Unlike a defence, which only tries to demonstrate that the coexistence of God and evil is logically possible, a *theodicy* additionally provides a framework wherein God and evil's existence is considered plausible.

Much of the Leibniz' book consists of a response to the ideas of the French philosopher Pierre Bayle (1647-1706), who is best known for his *Historical and Critical Dictionary* (1697). Bayle had argued that there is no defensible rational solution to the problem of why God permits evil. Bayle suggested that powerful philosophical arguments can be given against a number of orthodox Christian teachings, including the goodness, justice and freedom of God. Leibniz responds to Bayle's arguments in detail, arguing that it can be proved that God is an infinitely perfect being and that such a being must have created a world that has the greatest possible balance of

good over evil— “the best of all possible worlds”. *Theodicy* is also loosely based on the Leibniz’ conversation with Sophia Charlotte of Hanover, with whom he carried on a debate for many years.

Leibniz distinguishes three forms of evil: moral, physical and metaphysical. Moral evil is sin, physical evil is pain, and metaphysical evil is limitation. God permits moral and physical evil for the sake of greater goods and metaphysical evil (i.e. limitation) is unavoidable since any created universe must necessarily fall short of God’s absolute perfection. Human free will is consistent with God’s foreknowledge, because even though all events in the universe are foreseen and pre-determined, they are not necessitated (i.e. logically necessary), and only if human choices were necessitated would free will be an illusion.

Against Bayle’s claims that it is unjust for God to damn unbaptised infants or adult non-Christians that had lived as well as they could, Leibniz denies that Christian teaching supports such claims. Against Bayle’s argument that God cannot be free since he cannot fail to choose the best, Leibniz argues that such “moral necessity” is consistent with divine freedom. God would lack freedom only if there are no possible worlds in which less than maximal goodness exists, which is not the case, Leibniz argues.

ESSAIS
DE
THEODICÉE
SUR LA
BONTE' DE DIEU,
LA
LIBERTE' DE L'HOMME,
ET
L'ORIGINE DU MAL.

PAR M. LEIBNITZ.

NOUVELLE EDITION,
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CAUSA DEI ASSERTA PER JUSTITIAM EJUS

Pierre Bayle, c. 1675

EDITOR'S INTRODUCTION

I

Leibniz was above all things a metaphysician. That does not mean that his head was in the clouds, or that the particular sciences lacked interest for him. Not at all — he felt a lively concern for theological debate, he was a mathematician of the first rank, he made original contributions to physics, he gave a realistic attention to moral psychology. But he was incapable of looking at the objects of any special enquiry without seeing them as aspects or parts of one intelligible universe. He strove constantly after system, and the instrument on which his effort relied was the speculative reason. He embodied in an extreme form the spirit of his age. Nothing could be less like the spirit of ours. To many people now alive metaphysics means a body of wild and meaningless assertions resting on spurious argument. A professor of metaphysics may nowadays be held to deal handsomely with the duties of his chair if he is prepared to handle metaphysical statements at all, though it be only for the purpose of getting rid of them, by showing them up as confused forms of something else. A chair in metaphysical philosophy becomes analogous to a chair in tropical diseases: what is taught from it is not the propagation but the cure.

Confidence in metaphysical construction has ebbed and flowed through philosophical history; periods of speculation have been followed by periods of criticism. The tide will flow again, but it has not turned yet, and such metaphysicians as survive scarcely venture further than to argue a case for the possibility of their art. It would be an embarrassing task to open an approach to Leibnitian metaphysics from the present metaphysical position,

if there is a present position. If we want an agreed starting-point, it will have to be historical.

The historical importance of Leibniz' ideas is anyhow unmistakable. If metaphysical thinking is nonsensical, its empire over the human imagination must still be confessed; if it is as chimerical a science as alchemy, it is no less fertile in by-products of importance. And if we are to consider Leibniz historically, we cannot do better than take up his *Theodicy*, for two reasons. It was the only one of his main philosophical works to be published in his lifetime, so that it was a principal means of his direct influence; the Leibniz his own age knew was the Leibniz of the *Theodicy*. Then in the second place, the *Theodicy* itself is peculiarly rich in historical material. It reflects the world of men and books which Leibniz knew; it expresses the theological setting of metaphysical speculation which still predominated in the first years of the eighteenth century.

Leibniz is remembered for his philosophy; he was not a professional philosopher. He was offered academic chairs, but he declined them. He was a gentleman, a person of means, librarian to a reigning prince, and frequently employed in state affairs of trust and importance. The librarian might at any moment become the political secretary, and offer his own contributions to policy. Leibniz was for the greater part of his active life the learned and confidential servant of the House of Brunswick; when the Duke had nothing better to do with him, he set him to research into ducal history. If Leibniz had a profession in literature, it was history rather than philosophy. He was even more closely bound to the interests of his prince than John Locke was to those of the Prince of Orange. The Houses of Orange and of Brunswick were on the same side in the principal contest which divided Europe, the battle between Louis XIV and his enemies. It was a turning-point of the struggle when the Prince of Orange supplanted Louis's Stuart friends on the English throne. It was a continuation of the

same movement, when Leibniz' master, George I, succeeded to the same throne, and frustrated the restoration of the Stuart heir. Locke returned to England in the wake of the Prince of Orange, and became the representative thinker of the régime. Leibniz wished to come to the English court of George I, but was unkindly ordered to attend to the duties of his librarianship. So he remained in Hanover. He was then an old man, and before the tide of favour had turned, he died.

Posterity has reckoned Locke and Leibniz the heads of rival sects, but politically they were on the same side. As against Louis's political absolutism and enforced religious uniformity, both championed religious toleration and the freedom of the mind. Their theological liberalism was political prudence; it was not necessarily for that reason the less personally sincere. They had too much wisdom to meet bigotry with bigotry, or set Protestant intolerance against Catholic absolutism. But they had too much sympathy with the spirit of Europe to react into free thinking or to make a frontal attack on revealed truth. They took their stand on a fundamental Christian theism, the common religion of all good men; they repudiated the negative enormities of Hobbes and Spinoza.

The Christian was to hold a position covered by three lines of defences. The base line was to be the substance of Christian theism and of Christian morals, and it was to be held by the forces of sheer reason, without aid from scriptural revelation. The middle line was laid down by the general sense of Scripture, and the defence of it was this. 'Scriptural doctrine is reconcilable with the findings of sheer reason, but it goes beyond them. We believe the Scriptures, because they are authenticated by marks of supernatural intervention in the circumstances of their origin. We believe them, but reason controls our interpretation of them.' There remained the most forward and the most hazardous line: the special positions which a Church, a sect, or an individual might found upon the scriptural revelation. A

prudent man would not hold his advance positions in the same force or defend them with the same obstinacy as either of the lines behind them. He could argue for them, but he could not require assent to them.

One cannot help feeling, indeed, the readiness of these writers to fall back, not only from the front line to the middle line, but from the middle line itself to the base line. Leibniz, for example, writes with perfect seriousness and decency about the Christian scheme of redemption, but it hardly looks like being for him a crucial deliverance from perdition. It is not the intervention of Mercy, by which alone He possesses himself of us: it is one of the ways in which supreme Benevolence carries out a cosmic policy; and God's benevolence is known by pure reason, and apart from Christian revelation.

In one politically important particular the theological attitude of Leibniz differed from that of Locke. Both stood for toleration and for the minimizing of the differences between the sects. This was a serious enough matter in England, but it was an even more serious matter in Germany. For Germany was divided between Catholics and Protestants; effective toleration must embrace them both. English toleration might indulge a harmless Catholic minority, while rejecting the Catholic régime as the embodiment of intolerance. But this was not practical politics on the Continent; you must tolerate Catholicism on an equal footing, and come to terms with Catholic régimes. Leibniz was not going to damn the Pope with true Protestant fervour. It was his consistent aim to show that his theological principles were as serviceable to Catholic thinkers as to the doctors of his own church. On some points, indeed, he found his most solid support from Catholics; in other places there are hints of a joint Catholic-Lutheran front against Calvinism. But on the whole Leibniz' writings suggest that the important decisions cut across all the Churches, and not between them.

Leibniz was impelled to a compromise with ‘popery’, not only by the religious divisions of Germany, but (at one stage) by the political weakness of the German Protestant States. At the point of Louis XIV’s highest success, the Protestant princes had no hope but in Catholic Austria, and Austria was distracted by Turkish pressure in the rear. Leibniz hoped to relieve the situation by preaching a crusade. Could not the Christian princes sink their differences and unite against the infidel? And could not the Christian alliance be cemented by theological agreement? Hence Leibniz’ famous negotiation with Bossuet for a basis of Catholic-Lutheran concord. It was plainly destined to fail; and it was bound to recoil upon its author. How could he be a true Protestant who treated the differences with the Catholics as non-essentials? How could he have touched pitch and taken no defilement? Leibniz was generally admired, but he was not widely trusted. As a mere politician, he may be judged to have over-reached himself.

It has been the object of the preceding paragraphs to show that Leibniz the politician and Leibniz the theologian were one and the same person; not at all to suggest that his rational theology was just political expediency. We may apply to him a parody of his own doctrine, the pre-established harmony between nature and grace. Everything happens as though Leibniz were a liberal politician, and his theology expressed his politics. Yes, but equally, everything happens as though Leibniz were a philosophical theologian, and his politics expressed his theology. His appreciation of Catholic speculation was natural and sincere; his dogmatic ancestry is to be looked for in Thomism and Catholic humanism as much as anywhere. Above all, he had himself a liberal and generous mind. It gave him pleasure to appreciate good wherever he could see it, and to discover a soul of truth in every opinion.

From the moment when Leibniz became aware of himself as an independent thinker, he was the man of a doctrine. Sometimes he called it

‘my principles’, sometimes ‘the new system’, sometimes ‘pre-established harmony’. It could be quite briefly expressed; he was always ready to oblige his friends with a summary statement, either in a letter or an enclosed memorandum, and several such have come down to us. The doctrine may have been in Leibniz’ view simple, but it was applicable to every department of human speculation or enquiry. It provided a new alphabet of philosophical ideas, and everything in heaven and earth could be expressed in it; not only could be, but ought to be, and Leibniz showed tireless energy in working out restatements of standing problems.

As a man with an idea, with a philosophical nostrum, Leibniz may be compared to Bishop Berkeley. There was never any more doubt that Leibniz was a Leibnitian than that Berkeley was a Berkeleian. But there is no comparison between the two men in the width of their range. About many things Berkeley never took the trouble to Berkeleianize. To take the most surprising instance of his neglect — he assured the world that his whole doctrine pointed to, and hung upon, theology. But what sort of a theology? He scarcely took the first steps in the formulation of it. He preferred to keep on defending and explaining his *esse est percipi*. With Leibniz it is wholly different; he carries his new torch into every corner, to illuminate the dark questions.

The wide applicability of pre-established harmony might come home to its inventor as a rich surprise. The reflective historian will find it less surprising, for he will suspect that the applications were in view from the start. What was Leibniz thinking of when the new principle flashed upon him? What was he *not* thinking of? He had a many-sided mind. If the origins of the principle were complex, little wonder that its applications were manifold. Every expositor of Leibniz who does not wish to be endlessly tedious must concentrate attention on one aspect of Leibniz’ principle, and one source of its origin. We will here give an account of the

matter which, we trust, will go most directly to the heart of it, but we will make no claims to sufficient interpretation of Leibniz' thought-processes.

Leibniz, then, like all the philosophers of the seventeenth century, was reforming scholasticism in the light of a new physical science. The science was mathematical in its form, mechanistical in its doctrine, and unanswerable in its evidence — it got results. But it was metaphysically intractable, and the doctrines of infinite and finite substance which it generated furnish a gallery of metaphysical grotesques; unless we are to except Leibniz; his system is, if nothing else, a miracle of ingenuity, and there are moments when we are in danger of believing it.

It is a natural mistake for the student of seventeenth-century thought to underestimate the tenacity of scholastic Aristotelianism. Descartes, we all know, was reared in it, but then Descartes overthrew it; and he had done his work and died by the time that Leibniz was of an age to philosophize at all. We expect to see Leibniz starting on his shoulders and climbing on from there. We are disappointed. Leibniz himself tells us that he was raised in the scholastic teaching. His acquaintance with Descartes's opinions was second-hand, and they were retailed to him only that they might be derided. He agreed, like an amiable youth, with his preceptors.

The next phase of his development gave him a direct knowledge of Cartesian writings, and of other modern books beside, such as those of the atomist Gassendi. He was delighted with what he read, because of its fertility in the field of physics and mathematics; and for a short time he was an enthusiastic modern. But presently he became dissatisfied. The new systems did not go far enough, they were still scientifically inadequate. At the same time they went too far, and carried metaphysical paradox beyond the limits of human credulity.

There is no mystery about Leibniz' scientific objections to the new philosophers. If he condemned them here, it was on the basis of scientific thought and observation. Descartes's formulation of the laws of motion could, for example, be refuted by physical experiment; and if his general view of physical nature was bound up with it, then so much the worse for the Cartesian philosophy. But whence came Leibniz' more strictly metaphysical objections? Where had he learned that standard of metaphysical adequacy which showed up the inadequacy of the new metaphysicians? His own disciples might be satisfied to reply, that he learnt it from Reason herself; but the answer will not pass with us. Leibniz reasoned, indeed, but he did not reason from nowhere, nor would he have got anywhere if he had. His conception of metaphysical reason was what his early scholastic training had made it.

There are certain absurd opinions which we are sure we have been taught, although, when put to it, we find it hard to name the teacher. Among them is something of this sort. 'Leibniz was a scholarly and sympathetic thinker. He had more sense of history than his contemporaries, and he was instinctively eclectic. He believed he could learn something from each of his great predecessors. We see him reaching back to cull a notion from Plato or from Aristotle; he even found something of use in the scholastics. In particular, he picked out the Aristotelian "entelechy" to stop a gap in the philosophy of his own age.' What this form of statement ignores is that Leibniz *was* a scholastic: a scholastic endeavouring, like Descartes before him, to revolutionize scholasticism. The word 'entelechy' was, indeed, a piece of antiquity which Leibniz revived, but the thing for which it stood was the most familiar of current scholastic conceptions. 'Entelechy' means active principle of wholeness or completion in an individual thing. Scholasticism was content to talk about it under the name of 'substantial form' or 'formal cause'. But the scholastic interpretation of the idea was

hopelessly discredited by the new science, and the scholastic terms shared the discredit of scholastic doctrine. Leibniz wanted a term with a more general sound. 'There is an *X*', he wanted to say, 'which scholasticism has defined as substantial form, but I am going to give a new definition of it.' Entelechy was a useful name for *X*, the more so as it had the authority of Aristotle, the master of scholasticism.

Under the name of entelechy Leibniz was upholding the soul of scholastic doctrine, while retrenching the limbs and outward flourishes. The doctrine of substantial form which he learnt in his youth had had *something* in it; he could not settle down in the principles of Descartes or of Gassendi, because both ignored this vital *something*. Since the requirements of a new science would not allow a return to sheer scholasticism, it was necessary to find a fresh philosophy, in which entelechy and mechanism might be accommodated side by side.

If one had asked any 'modern' of the seventeenth century to name the 'ancient' doctrine he most abominated, he would most likely have replied, 'Substantial form'. Let us recall what was rejected under this name, and why.

The medieval account of physical nature had been dominated by what we may call common-sense biology. Biology, indeed, is the science of the living, and the medievals were no more inclined than we are to endow all physical bodies with life. What they did do was to take living bodies as typical, and to treat other bodies as imperfectly analogous to them. Such an approach was *a priori* reasonable enough. For we may be expected to know best the physical being closest to our own; and we, at any rate, are alive. Why not argue from the better known to the less known, from the nearer to the more remote, interpreting other things by the formula of our own being, and allowing whatever discount is necessary for their degree of unlikeness to us?

Common-sense biology reasons as follows. In a living body there is a certain pattern of organized parts, a certain rhythm of successive motions, and a certain range of characteristic activities. The pattern, the sheer anatomy, is basic; but it cannot long continue to exist (outside a refrigerator) without accompanying vital rhythms in heart, respiration and digestion. Nor do these perform their parts without the intermittent support of variable but still characteristic activities: dogs not only breathe and digest, they run about, hunt their food, look for mates, bark at cats, and so on. The anatomical pattern, the vital rhythm, and the characteristic acts together express dogginess; they reveal the specific form of the dog. They *reveal* it; exactly what the specific form *consisted in* was the subject of much medieval speculation. It need not concern us here.

Taking the form of the species for granted, common-sense biology proceeds to ask how it comes to be in a given instance, say in the dog Toby. Before this dog was born or thought of, his form or species was displayed in each of his parents. And now it looks as though the form of dog had detached itself from them through the generative act, and set up anew on its own account. How does it do that? By getting hold of some materials in which to express itself. At first it takes them from the body of the mother, afterwards it collects them from a wider environment, and what the dog eats becomes the dog.

What, then, is the relation of the assimilated materials to the dog-form which assimilates them? Before assimilation, they have their own form. Before the dog eats the leg of mutton, it has the form given to it by its place in the body of a sheep. What happens to the mutton? Is it without remainder transubstantiated from sheep into dog? It loses all its distinctively sheep-like characteristicsm but there may be some more basically material characteristics which it preserves. They underlay the structure of the mutton, and they continue to underlie the structure of the dog's flesh which

supplants it. Whatever these characteristics may be, let us call them common material characteristics, and let us say that they belong to or compose a common material nature.

The common material nature has its own way of existing, and perhaps its own principles of physical action. We may suppose that we know much or that we know little about it. This one thing at least we know, that it is capable of becoming alternatively either mutton or dog's flesh. It is not essential to it to be mutton, or mutton it would always be; nor dog's flesh, or it would always be dog's flesh. It is capable of becoming either, according as it is captured by one or other system of formal organization. So the voters who are to go to the polls are, by their common nature, Englishmen; they are essentially neither Socialist curs nor Conservative sheep, but intrinsically capable of becoming either, if they become captured by either system of party organization.

According to this way of thinking, there is a certain *looseness* about the relation of the common material nature to the higher forms of organization capable of capturing it. Considered in itself alone, it is perhaps to be seen as governed by absolutely determined laws of its own. It is heavy, then it will fall unless obstructed; it is solid, then it will resist intrusions. But considered as material for organization by higher forms, it is indeterminate. It acts in one sort of way under the persuasion of the sheep-form, and in another sort of way under the persuasion of the dog-form, and we cannot tell how it will act until we know which form is going to capture it. No amount of study bestowed on the common material nature will enable us to judge how it will behave under the persuasion of the higher organizing form. The only way to discover that is to examine the higher form itself.

Every form, then, will really be the object of a distinct science. The form of the sheep and the form of the dog have much in common, but that merely happens to be so; we cannot depend upon it, or risk inferences from sheep

to dog: we must examine each in itself; we shall really need a science of probatology about sheep, and cynology about dogs. Again, the common material nature has its own principles of being and action, so it will need a science of itself, which we may call hylology. Each of these sciences is mistress in her own province; but how many there are, and how puzzlingly they overlap! So long as we remain within the province of a single science, we may be able to think rigorously, everything will be ‘tight’. But as soon as we consider border-issues between one province and another, farewell to exactitude: everything will be ‘loose’. We can think out hylology till we are blue in the face, but we shall never discover anything about the entry of material elements into higher organizations, or how they behave when they get there. We may form perfect definitions and descriptions of the form of the dog as such, and still derive no rules for telling what elements of matter will enter into the body of a given dog or how they will be placed when they do. All we can be sure of is, that the dog-form will keep itself going in, and by means of, the material it embodies — unless the dog dies. But what happens to the matter in the body of the dog is ‘accidental’ to the nature of the matter; and the use of this matter, rather than of some other equally suitable, is accidental to the nature of the dog.

No account of material events can dispense with accidental relations altogether. We must at least recognize that there are accidental relations between particular things. Accident in the sense of brute fact had to be acknowledged even by the tidiest and most dogmatic atomism of the last century. That atomism must allow it to be accidental, in this sense, that the space surrounding any given atom was occupied by other atoms in a given manner. It belonged neither to the nature of space to be occupied by just those atoms in just those places, nor to the nature of the atoms to be distributed just like that over space; and so in a certain sense the environment of any atom was an accidental environment. That is, the

particular arrangement of the environment was accidental. The nature of the environment was not accidental at all. It was proper to the nature of the atom to be in interaction with other atoms over a spatial field, and it never encountered in the fellow-denizens of space any other nature but its own. It was not subject to the accident of meeting strange natures, nor of becoming suddenly subject to strange or unequal laws of interaction. All interactions, being with its own kind, were reciprocal and obedient to a single set of calculable laws.

But the medieval philosophy had asserted accidental relations between distinct sorts of *natures*, the form of living dog and the form of dead matter, for example. No one could know *a priori* what effect an accidental relation would produce, and all accidental relations between different pairs of natures were different: at the most there was analogy between them. Every different nature had to be separately observed, and when you had observed them all, you could still simply write an inventory of them, you could not hope to rationalize your body of knowledge. Let us narrow the field and consider what this doctrine allows us to know about the wood of a certain kind of tree. We shall begin by observing the impressions it makes on our several senses, and we shall attribute to it a substantial form such as naturally to give rise to these impressions, without, perhaps, being so rash as to claim a knowledge of what this substantial form is. Still we do not know what its capacities of physical action and passion may be. We shall find them out by observing it in relation to different ‘natures’. It turns out to be combustible by fire, resistant to water, tractable to the carpenter’s tools, intractable to his digestive organs, harmless to ostriches, nourishing to wood-beetles. Each of these capacities of the wood is distinct; we cannot relate them intelligibly to one another, nor deduce them from the assumed fundamental ‘woodiness’.

We can now see why ‘substantial forms’ were the *bêtes noires* of the seventeenth-century philosophers. It was because they turned nature into an unmanageable jungle, in which trees, bushes, and parasites of a thousand kinds wildly interlaced. There was nothing for it, if science was to proceed, but to clear the ground and replant with spruce in rows: to postulate a single uniform nature, of which there should be a single science. Now neither probatology nor cynology could hope to be universal — the world is not all sheep nor all dog: it would have to be hylology; for the world is, in its spatial aspect, all material. Let us say, then, that there is one uniform material nature of things, and that everything else consists in the arrangements of the basic material nature; as the show of towers and mountains in the sunset results simply from an arrangement of vapours. And let us suppose that the interactions of the parts of matter are all like those which we can observe in dead manipulable bodies — in mechanism, in fact. Such was the postulate of the new philosophers, and it yielded them results.

It yielded them results, and that was highly gratifying. But what, meanwhile, had happened to those palpable facts of common experience from which the whole philosophy of substantial forms had taken its rise? Is the wholeness of a living thing the mere resultant of the orderly operations of its parts? Is a bee no more essentially one than a swarm is? Is the life of a living animal indistinguishable from the rhythm of a going watch, except in degree of complication and subtlety of contrivance? And if an animal’s body, say my own, is simply an agglomerate of minute interacting material units, and its wholeness is merely accidental and apparent, how is my conscious mind to be adjusted to it? For my consciousness appears to identify itself with that whole vital pattern which used to be called the substantial form. We are now told that the pattern is nothing real or active, but the mere accidental resultant of distinct interacting forces: it does no

work, it exercises no influence or control, it *is* nothing. How then can it be the vehicle and instrument of my conscious soul? It cannot. Then is my soul homeless? Or is it to be identified with the activity and fortunes of a single atomic constituent of my body, a single cog in the animal clockwork? If so, how irrational! For the soul does not experience itself as the soul of one minute part, but as the soul of the body.

Such questions rose thick and fast in the minds of the seventeenth-century philosophers. It will cause us no great surprise that Leibniz should have quickly felt that the Formal Principle of Aristotle and of the Scholastic philosophy must be by hook or by crook reintroduced — not as the detested *substantial form*, but under a name by which it might hope to smell more sweet, *entelechy*.

Nothing so tellingly revealed the difficulties of the new philosophy in dealing with living bodies as the insufficiency of the solutions Descartes had proposed. He had boldly declared the unity of animal life to be purely mechanical, and denied that brutes had souls at all, or any sensation. He had to admit soul in man, but he still denied the substantial unity of the human body. It was put together like a watch, it was many things, not one: if Descartes had lived in our time, he would have been delighted to compare it with a telephone system, the nerves taking the place of the wires, and being so arranged that all currents of 'animal spirit' flowing in them converged upon a single unit, a gland at the base of the brain. In this unit, or in the convergence of all the motions upon it, the 'unity' of the body virtually consisted; and the soul was incarnate, not in the plurality of members (for how could it, being one, indwell many things?), but in the single gland.

Even so, the relation between the soul and the gland was absolutely unintelligible, as Descartes disarmingly confessed. Incarnation was all very well in the old philosophy: those who had allowed the interaction of disparate natures throughout the physical world need find no particular

difficulty about the special case of it provided by incarnation. Why should not a form of conscious life so interact with what would otherwise be dead matter as to ‘indwell’ it? But the very principle of the new philosophy disallowed the interaction of disparate natures, because such an interaction did not allow of exact formulation, it was a ‘loose’ and not a ‘tight’ relation.

From a purely practical point of view the much derided pineal gland theory would serve. If we could be content to view Descartes as a man who wanted to make the world safe for physical science, then there would be a good deal to be said for his doctrine. In the old philosophy exact science had been frustrated by the hypothesis of loose relations all over the field of nature. Descartes had cleared them from as much of the field as science was then in a position to investigate; he allowed only one such relation to subsist, the one which experience appeared unmistakably to force upon us — that between our own mind and its bodily vehicle. He had exorcized the spirits from the rest of nature; and though there was a spirit here which could not be exorcized, the philosophic conjurer had nevertheless confined it and its unaccountable pranks within a minutely narrow magic circle: all mind could do was to turn the one tiny switch at the centre of its animal telephone system. It could create no energy — it could merely redirect the currents actually flowing.

Practically this might do, but speculatively it was most disturbing. For if the ‘loose relation’ had to be admitted in one instance, it was admitted in principle; and one could not get rid of the suspicion that it would turn up elsewhere, and that the banishment of it from every other field represented a convenient pragmatic postulate rather than a solid metaphysical truth. Moreover, the correlation of the unitary soul with the unitary gland might do justice to a mechanistical philosophy, but it did not do justice to the soul’s own consciousness of itself. The soul’s consciousness is the ‘idea’ or ‘representation’ of the life of the whole body, certainly not of the life of the

pineal gland nor, as the unreflective nowadays would say, of the brain. I am not conscious in, or of, my brain except when I have a headache; consciousness is in my eyes and finger-tips and so on. It is physically true, no doubt, that consciousness in and of my finger-tips is not possible without the functioning of my brain; but that is a poor reason for locating the consciousness in the brain. The filament of the electric bulb will not be incandescent apart from the functioning of the dynamo; but that is a poor reason for saying that the incandescence is in the dynamo.

Certainly the area of representation in our mind is not simply equivalent to the area of our body. But in so far as the confines of mental representation part company with the confines of the body, it is not that they may contract and fall back upon the pineal gland, but that they may expand and advance over the surrounding world. The mind does not represent its own body merely, it represents the world in so far as the world affects that body or is physically reproduced in it. The mind has no observable natural relation to the pineal gland. It has only two natural relations: to its body as a whole and to its effective environment. What Descartes had really done was to pretend that the soul was related to the pineal gland as it is in fact related to its whole body; and then that it was related to the bodily members as in fact it is related to outer environment. The members became an inner environment, known only in so far as they affected the pineal gland; just as the outer environment in its turn was to be known only in so far as it affected the members.

This doctrine of a double environment was wholly artificial. It was forced on Descartes by the requirements of mechanistical science: if the members were simply a plurality of things, they must really be parts of environment; the body which the soul indwelt must be *a* body; presumably,

then, the pineal gland. An untenable compromise, surely, between admitting and denying the reality of the soul's incarnation.

What, then, was to be done? Descartes's rivals and successors attempted several solutions, which it would be too long to examine here. They dissatisfied Leibniz and they have certainly no less dissatisfied posterity. It will be enough for us here to consider what Leibniz did. He admitted, to begin with, the psychological fact. The unity of consciousness is the representation of a plurality — the plurality of the members, and through them the plurality of the world. Here, surely, was the very principle the new philosophy needed for the reconciliation of substantial unity with mechanical plurality of parts. For it is directly evident to us that consciousness focuses the plurality of environing things in a unity of representation. This is no philosophical theory, it is a simple fact. Our body, then, as a physical system is a mechanical plurality; as focused in consciousness it is a unity of 'idea'.

Very well: but we have not got far yet. For the old difficulty still remains — it is purely arbitrary, after all, that a unitary consciousness should be attached to, and represent, a mechanical collection of things which happen to interact in a sort of pattern. If there is a consciousness attached to human bodies, then why not to systems of clockwork? If the body is *represented* as unity, it must surely be because it *is* unity, as the old philosophy had held. But how can we reintroduce unity into the body without reintroducing substantial form, and destroying the mechanistical plurality which the new science demanded?

It is at this point that Leibniz produces the speculative postulate of his system. Why not reverse the relation, and make the members represent the mind as the mind represents the members? For then the unity of person represented in the mind will become something actual in the members also.

Representation appears to common sense to be a one-way sort of traffic. If my mind represents my bodily members, something happens to my mind, for it becomes a representation of such members in such a state; but nothing happens to the members by their being so represented in the mind. The mental representation obeys the bodily facts; the bodily facts do not obey the mental representation. It seems nonsense to say that my members obey my mind *because* they are mirrored in it. And yet my members do obey my mind, or at least common sense supposes so. Sometimes my mind, instead of representing the state my members are in, represents a state which it intends that they shall be in, for example, that my hand should go through the motion of writing these words. And my hand obeys; its action becomes the moving diagram of my thought, my thought is represented or expressed in the manual act. Here the relation of mind and members appears to be reversed: instead of its representing them, they represent it. With this representation it is the opposite of what it was with the other. By the members' being represented in the mind, something happened to the mind, and nothing to the members; by the mind's being represented in the members something happens to the members and nothing to the mind.

Why should not we take this seriously? Why not allow that there is two-way traffic — by one relation the mind represents the members, by another the members represent the mind? But then again, how can we take it seriously? For representation, in the required sense, is a mental act; brute matter can represent nothing, only mind can represent. And the members are brute matter. But are they? How do we know that? By brute matter we understand extended lumps of stuff, interacting with one another mechanically, as do, for example, two cogs in a piece of clockwork. But this is a large-scale view. The cogs are themselves composed of interrelated parts and those parts of others, and so on *ad infinitum*. Who knows what the ultimate constituents really are? The 'modern' philosophers, certainly, have

proposed no hypothesis about them which even looks like making sense. They have supposed that the apparently inert lumps, the cogs, are composed of parts themselves equally inert, and that by subdivision we shall still reach nothing but the inert. But this supposition is in flat contradiction with what physical theory demands. We have to allow the reality of *force* in physics. Now the force which large-scale bodies display may easily be the block-effect of activity in their minute real constituents. If not, where does it come from? Let it be supposed, then, that these minute real constituents are active because they are alive, because they are minds; for indeed we have no notion of activity other than the perception we have of our own. We have no notion of it except as something mental. On the hypothesis that the constituents of active body are also mental, this limitation in our conception of activity need cause us neither sorrow nor surprise.

The mind-units which make up body will not of course be developed and fully conscious minds like yours or mine, and it is only for want of a better word that we call them minds at all. They will be mere unselfconscious representations of their physical environment, as it might be seen from the physical point to which they belong by a human mind paying no attention at all to its own seeing. How many of these rudimentary ‘minds’ will there be in my body? As many as you like — as many as it is possible there should be — say an infinite number and have done with it.

We may now observe how this hypothesis introduces real formal unity without prejudicing mechanical plurality. Each of the mind-units in my body is itself and substantially distinct. But since each, in its own way and according to its own position, represents the superior and more developed mind which I call ‘me’, they will order themselves according to a common form. The order is real, not accidental: it is like the order of troops on a parade-ground. Each man is a distinct active unit, but each is really expressing by his action the mind of the officer in command. He is

expressing no less his relation to the other men in the ranks — to obey the officer is to keep in step with them. So the metaphysical units of the body, being all minds, represent one another as well as the dominant mind: one another co-ordinately, the dominant mind subordinately.

But if the metaphysically real units of the body are of the nature of mind, then *the* mind is a mind among minds, a spirit-atom among spirit-atoms. What then constitutes its superiority or dominance, and makes it a mind *par excellence*? Well, what constitutes the officer an officer? Two things: a more developed mentality and the fact of being obeyed. In military life these two factors are not always perfectly proportioned to one another, but in the order of Leibniz' universe they are. A fuller power to represent the universe is necessarily combined with dominance over an organized troop of members; for the mind knows the universe only in so far as the universe is expressed in its body. That is what the *finitude* of the mind means. Only an infinite mind appreciates the whole plurality of things in themselves; a finite mind perceives them in so far as mirrored in the physical being of an organized body of members. The more adequate the mirror, the more adequate the representation: the more highly organized the body, the more developed the mind.

The developed mind has an elaborate body; but the least developed mind has still some body, or it would lack any mirror whatever through which to represent the world. This means, in effect, that Leibniz' system is not an unmitigated spiritual atomism. For though the spiritual atoms, or monads, are the ultimate constituents out of which nature is composed, they stand composed together from the beginning in a minimal order which cannot be broken up. Each monad, if it is to be anything at all, must be a continuing finite representation of the universe, and to be that it must have a body, that is to say, it must have other monads in a permanent relation of mutual correspondence with it. And if you said to Leibniz, 'But surely any physical

body can be broken up, and this must mean the dissolution of the organic relation between its monadical constituents,' he would take refuge in the infinitesimal. The wonders revealed by that new miracle, the microscope, suggested what the intrinsic divisibility of space itself suggests — whatever organization is broken up, there will still be a minute organization within each of the fragments which remains unbroken — and so *ad infinitum*. You will never come down to loose monads, monads out of all organization. You will never disembody the monads, and so remove their representative power; you will only reduce their bodies and so impoverish their representative power. In this sense no animal dies and no animal is generated. Death is the reduction and generation the enrichment of some existing monad's body; and, by being that, is the enrichment or the reduction of the monad's mental life.

'But,' our common sense protests, 'it is too great a strain on our credulity to make the real nature of things so utterly different from what sense and science make of them. If the real universe is what you say it is, why do our minds represent it to us as they do?' The philosopher's answer is, 'Because they *represent* it. According to the truth of things, each monad is simply its own mental life, its own world-view, its own thoughts and desires. To know things as they are would be simultaneously to live over, as though from within and by a miracle of sympathy, the biographies of an infinite number of distinct monads. This is absolutely impossible. Our senses represent the coexistent families of monads *in the gross*, and therefore conventionally; what is in fact the mutual representation of monads in ordered systems, is represented as the mechanical interaction of spatially extended and material parts.' This does not mean that science is overthrown. The physical world-view is in terms of the convention of representation, but it is not, for all that, illusory. It can, ideally, be made as true as it is capable of being. There is no reason whatever for confusing the 'well-grounded seemings' of the

apparent physical world with the fantastic seemings of dream and hallucination.

So far the argument seems to draw whatever cogency it has from the simplicity and naturalness of the notion of representation. The nature of idea, it is assumed, is to represent plurality in a unified view. If idea did not represent, it would not be idea. And since there *is* idea (for our minds at least exist and are made up of idea) there is representation. It belongs to idea to represent, and since the whole world has now been interpreted as a system of mutually representing ideations, or ideators, it might seem that all their mutual relations are perfectly natural, a harmony of agreement which could not be other than it is. But if so, why does Leibniz keep saying that the harmony is *pre-established*, by special and infinitely elaborate divine decrees?

Leibniz himself says that the very nature of representation excludes interaction. By representing environment a mind does not do anything to environment, that is plain. But it is no less plain that environment does nothing to it, either. The act of representing is simply the act of the mind; it represents *in view of* environment, of course, but not under the causal influence of environment. Representation is a business carried on by the mind on its own account, and in virtue of its innate power to represent.

Very well; but does this consideration really drive us into theology? Is not Leibniz the victim of a familiar fallacy, that of incompletely stated alternatives? '*Either* finite beings interact *or else* they do not directly condition one another. Monads do not interact, therefore they do not directly condition one another. How then explain the actual conformity of their mutual representation, without recourse to divine fore-ordaining?' It seems sufficient to introduce a further alternative in the first line of the argument, and we are rid of the theology. Things may condition the action of a further thing, without acting upon it. It acts of itself, but it acts in view

of what they are. We are tempted to conclude that Leibniz has introduced the *Deus ex machina* with the fatal facility of his age. ‘Where a little further meditation on the characters in the play would furnish a natural *dénouement*, he swings divine intervention on to the scene by wires from the ceiling. It is easy for us to reconstruct for him the end of the piece without recourse to stage-machines.’

Is it? No, I fear it is not. There is really no avoiding the pre-established harmony. And so we shall discover, if we pursue our train of reflexion a little further. It is natural, we were saying, than an idea should represent an environment; indeed, it *is* the representation of one. Given no environment to represent, it would be empty, a mere capacity for representation. Then every idea or ideator, taken merely in itself, *is* an empty capacity. But of what is the environment of each made up? According to the Leibnitian theory, of further ideas or ideators: of empty capacities, therefore. Then no idea will either be anything in itself, or find anything in its neighbours to represent. An unhappy predicament, like that of a literary clique in which all the members are adepts at discussing one another’s ideas — only that unfortunately none of them are provided with any; or like the shaky economics of the fabled Irish village where they all lived by taking in one another’s washing.

It is useless, then, to conceive representations as simply coming into existence in response to environment, and modelling themselves on environment. They must all mutually reflect environment or they would not be representations; but they must also exist as themselves and in their own right or there would be no environment for them mutually to represent. Since the world is infinitely various, each representor must have its own distinct character or nature, as our minds have: that is to say, it must represent in its own individual way; and all these endlessly various representations must be so constituted as to form a mutually reflecting

harmony. Considered as a representation, each monadical existence simply reflects the universe after its own manner. But considered as something to be represented by the others, it is a self-existent mental life, or world of ideas. Now when we are considering the fact of representation, that which is to be represented comes first and the representation follows upon it. Thus in considering the Leibnitian universe, we must begin with the monads as self-existent mental lives, or worlds of ideas; their representation of one another comes second. Nothing surely, then, but omnipotent creative wisdom could have pre-established between so many distinct given mental worlds that harmony which constitutes their mutual representation.

Our common-sense pluralistic thinking escapes from the need of the pre-established harmony by distinguishing what we are from what we do. Let the world be made up of a plurality of agents in a 'loose' order, with room to manoeuvre and to adjust themselves to one another. Then, by good luck or good management, through friction and disaster, by trial and error, by accident or invention, they may work out for themselves a harmony of *action*. There is no need for divine preordaining here. But on Leibniz' view what the monads do is to represent, and what they are is representation; there is no ultimate distinction between what they are and what they do: all that they do belongs to what they are. The whole system of action in each monad, which fits with such infinite complexity the system of action in each other monad, is precisely the existence of that monad, and apart from it the monad is not. The monads do not *achieve* a harmony, they *are* a harmony, and therefore they are pre-established in harmony.

Leibniz denied that he invoked God to intervene in nature, or that there was anything arbitrary or artificial about his physical theology. He was simply analysing nature and finding it to be a system of mutual representation; he was analysing mutual representation and finding it to be of its nature intrinsically pre-established, and therefore God-dependent. He

was not adding anything to mutual representation, he was just showing what it necessarily contained or implied. At least he was doing nothing worse than recognized scholastic practice. Scholastic Aristotelianism explained all natural causality as response to stimulus, and then had to postulate a stimulus which stimulated without being stimulated, and this was God. Apart from this supreme and first stimulus nothing would in fact be moving. The Aristotelians claimed simply to be analysing the nature of physical motion as they perceived it, and to find the necessity of perpetually applied divine stimulation implicit in it. No violence was thereby done to the system of physical motion nor was anything brought in from without to patch it up; it was simply found to be of its own nature God-dependent.

It seems as though the reproachful description *'Deus ex machina'* should be reserved for more arbitrary expedients than Aristotle's or Leibniz', say for the occasionalist theory. Occasionalism appeared to introduce God that he might make physical matter do what it had no natural tendency to do, viz. to obey the volitions of finite mind. Ideas, on the other hand, have a natural tendency to represent one another, for to be an idea is to be a representation; God is not introduced by Leibniz to make them correspond, he is introduced to work a system in which they shall correspond. This may not be *Deus-ex-machina philosophy*, but it is *physical theology*; that is to say, it treats divine action as one factor among the factors which together constitute the working of the natural system. And this appears to be perhaps unscientific, certainly blasphemous: God's action cannot be a factor among factors; the Creator works through and in all creaturely action equally; we can never say 'This is the creature, and that is God' of distinguishable causalities in the natural world. The creature is, in its creaturely action, self-sufficient: but because a creature, insufficient to itself throughout, and sustained by its Creator both in existence and in action.

The only acceptable argument for theism is that which corresponds to the religious consciousness, and builds upon the insufficiency of finite existence throughout, because it is finite. All arguments to God's existence from a particular gap in our account of the world of finites are to be rejected. They do not indicate God, they indicate the failure of our power to analyse the world-order. When Leibniz discovered that his system of mutual representations needed to be pre-established, he ought to have seen that he had come up a cul-de-sac and backed out; he ought not to have said, 'With the help of God I will leap over the wall.'

If we condemn Leibniz for writing physical theology, we condemn not him but his age. No contemporary practice was any better, and much of it a good deal worse, as Leibniz liked somewhat complacently to point out. And because he comes to theology through physical theology, that does not mean that all his theology was physical theology and as such to be written off. On the contrary, Leibniz is led to wrestle with many problems which beset any philosophical theism of the Christian type. This is particularly so in the *Theodicy*, as its many citations of theologians suggest. His discussions never lack ingenuity, and the system of creation and providence in which they result has much of that luminous serenity which colours the best works of the Age of Reason.

Every theistic philosopher is bound, with whatever cautions, to conceive God by the analogy of the human mind. When Leibniz declares the harmony of monads to be pre-established by God, he is invoking the image of intelligent human pre-arrangement. Nor is he content simply to leave it at that: he endeavours as well as he may to conceive the sort of act by which God pre-arranges; and this involves the detailed adaptation for theological purposes of Leibnitian doctrine about the human mind.

The human mind, as we have seen, is the mind predominant in a certain system of 'minds', viz. in those which constitute the members of the human

body. If we call it predominant, we mean that its system of ideas is more developed than theirs, so that there are more points in which each of them conforms to it than in which it conforms to any one of them. The conception of a divine pre-establishing mind will be analogous. It will be the conception of a mind *absolutely* dominant, to whose ideas, that is to say, the whole system simply corresponds, without any reciprocating correspondence on his side. In a certain sense this is to make God the 'Mind of the World'; and yet the associations of the phrase are misleading. It suggests that the world is an organism or body in which the divine mind is incarnate, and on which he relies for his representations. But that is nonsense; the world is not *a* body, nor is it organic to God. Absolute dominance involves absolute transcendence: if everything in the world without remainder simply obeys the divine thoughts, that is only another way of saying that the world is the creature of God; the whole system is pre-established by him who is absolute Being and perfectly independent of the world.

Of createdness, or pre-establishedness, there is no more to be said: we can think of it as nothing but the pure or absolute case of subjection to dominant mind. It is no use asking further *how* God's thoughts are obeyed in the existence and action of things. What we can and must enquire into further, is the nature of the divine thoughts which are thus obeyed. They must be understood to be volitions or decrees. There are indeed two ways in which things obey the divine thought, and correspondingly two sorts of divine thoughts that they obey. In so far as created things conform to the mere universal principles of reason, they obey a reasonableness which is an inherent characteristic of the divine mind itself. If God wills the existence of any creature, that creature's existence must observe the limits prescribed by eternal reason: it cannot, for example, both have and lack a certain characteristic in the same sense and at the same time; nor can it contain two

parts and two parts which are not also countable as one part and three parts. Finite things, if they exist at all, must thus conform to the reasonableness of the divine nature, but what the divine reasonableness thus prescribes is highly general: we can deduce from it only certain laws which any finite things must obey, we can never deduce from it which finite things there are to be, nor indeed that there are to be any. Finite things are particular and individual: each of them might have been other than it is or, to speak more properly, instead of any one of them there might have existed something else; it was, according to the mere principles of eternal reason, equally possible. But if so, the whole universe, being made up of things each of which might be otherwise, might as a whole be otherwise. Therefore the divine thoughts which it obeys by existing have the nature of *choices* or *decrees*.

What material does the finite mind supply for an analogical picture of the infinite mind making choices or decrees? If we use such language of God, we are using language which has its first and natural application to ourselves. We all of us choose, and those of us who are in authority make decrees. What is to choose? It involves a real freedom in the mind. A finite mind, let us remember, is nothing but a self-operating succession of perceptions, ideas, or representations. With regard to some of our ideas we have no freedom, those, for example, which represent to us our body. We think of them as constituting our given substance. They are sheer datum for us, and so are those reflexions of our environment which they mediate to us. They make up a closely packed and confused mass; they persevere in their being with an obstinate innate force, the spiritual counterpart of the force which we have to recognize in things as physically interpreted. Being real spiritual force, it is quasi-voluntary, and indeed do we not love our own existence and, in a sense, will it in all its necessary circumstances? But if we can be said to will to be ourselves and to enact with native force what

our body and its environment makes us, we are merely willing to conform to the conditions of our existence; we are making no choice. When, however, we think freely or perform deliberate acts, there is not only force but choice in our activity. Choice between what? Between alternative possibilities arising out of our situation. And choice in virtue of what? In virtue of the appeal exercised by one alternative as seemingly better.

Can we adapt our scheme of choice to the description of God's creative decrees? We will take the second point in it first: our choice is in virtue of the appeal of the seeming best. Surely the only corrective necessary in applying this to God is the omission of the word 'seeming'. His choice is in virtue of the appeal of the simply best. The other point causes more trouble. We choose between possibilities which arise for us out of our situation in the system of the existing world. But as the world does not exist before God's creative choices, he is in no world-situation, and no alternative possibilities can arise out of it, between which he should have to choose. But if God does not choose between intrinsic possibilities of some kind, his choice becomes something absolutely meaningless to us — it is not a choice at all, it is an arbitrary and unintelligible *fiat*.

Leibniz' solution is this: what are mere possibilities of thought for us are possibilities of action for God. For a human subject, possibilities of action are limited to what arises out of his actual situation, but possibilities for thought are not so limited. I can conceive a world different in many respects from this world, in which, for example, vegetables should be gifted with thought and speech; but I can do nothing towards bringing it about. My imaginary world is practically impossible but speculatively possible, in the sense that it contradicts no single principle of necessary and immutable reason. I, indeed, can explore only a very little way into the region of sheer speculative possibility; God does not explore it, he simply possesses it all:

the whole region of the possible is but a part of the content of his infinite mind. So among all possible creatures he chooses the best and creates it.

But the whole realm of the possible is an actual infinity of ideas. Out of the consideration of an infinity of ideas, how can God arrive at a choice? Why not? His mind is not, of course, discursive; he does not successively turn over the leaves of an infinite book of sample worlds, for then he would never come to the end of it. Embracing infinite possibility in the single act of his mind, he settles his will with intuitive immediacy upon the best. The inferior, the monstrous, the absurd is not a wilderness through which he painfully threads his way, it is that from which he immediately turns; his wisdom is his elimination of it.

But in so applying the scheme of choice to God's act, have we not invalidated its application to our own? For if God has chosen the whole form and fabric of the world, he has chosen everything in it, including the choices we shall make. And if our choices have already been chosen for us by God, it would seem to follow that they are not real open choices on our part at all, but are pre-determined. And if they are pre-determined, it would seem that they are not really even choices, for a determined choice is not a choice. But if we do not ourselves exercise real choice in any degree, then we have no clue to what any choice would be: and if so, we have no power of conceiving divine choice, either; and so the whole argument cuts its own throat.

There are two possible lines of escape from this predicament. One is to define human choice in such a sense that it allows of pre-determination without ceasing to be choice; and this is Leibniz' method, and it can be studied at length in the *Theodicy*. He certainly makes the very best he can of it, and it hardly seems that any of those contemporaries whose views he criticizes was in a position to answer him. The alternative method is to make the most of the negative element involved in all theology. After all,

we do not positively or adequately understand the nature of infinite creative will. Perhaps it is precisely the transcendent glory of divine freedom to be able to work infallibly through free instruments. But so mystical a paradox is not the sort of thing we can expect to appeal to a late-seventeenth-century philosopher.

One criticism of Leibniz' argument we cannot refrain from making. He allows himself too easy a triumph when he says that the only alternative to a choice determined by a prevailing inclination towards one proposal is a choice of mere caprice. There is a sort of choice Leibniz never so much as considers and which appears at least to fall quite outside his categories, and that is the sort of choice exercised in artistic creativity. In such choice we freely feel after the shaping of a scheme, we do not arbitrate simply between shaped and given possible schemes. And perhaps some such element enters into all our choices, since our life is to some extent freely designed by ourselves. If so, our minds are even more akin to the divine mind than Leibniz realized. For the sort of choice we are now referring to seems to be an intuitive turning away from an infinite, or at least indefinite, range of less attractive possibility. And such is the nature of the divine creative choice. The consequence of such a line of speculation would be, that the divine mind designs more through us, and less simply for us, than Leibniz allowed: the 'harmony' into which we enter would be no longer simply 'pre-established'. Leibniz, in fact, could have nothing to do with such a suggestion, and he would have found it easy to be ironical about it if his contemporaries had proposed it.

II

Leibniz wrote two books; a considerable number of articles in learned periodicals; and an enormous number of unpublished notes, papers and letters, preserved in the archives of the Electors of Hanover not because of

the philosophical significance of some of them, but because of the political importance of most of them. From among this great mass various excerpts of philosophical interest have been made by successive editors of Leibniz' works. It may be that the most profound understanding of his mind is to be derived from some of these pieces, but if we wish to consider the public history of Leibniz, we may set them aside.

Of the two books, one was published, and the other never was. The *New Essays* remained in Leibniz' desk, the *Theodicy* saw the light. And so, to his own and the succeeding generation, Leibniz was known as the author of the *Theodicy*.

The articles in journals form the immediate background to the two books. In 1696 Leibniz heard that a French translation of Locke's *Essay concerning Human Understanding* was being prepared at Amsterdam. He wrote some polite comments on Locke's great work, and published them. He also sent them to Locke, hoping that Locke would write a reply, and that Leibniz' reflexions and Locke's reply might be appended to the projected French translation. But Locke set Leibniz' comments aside. Leibniz, not to be defeated, set to work upon the *New Essays*, in which the whole substance of Locke's book is systematically discussed in dialogue. The *New Essays* were written in 1703. But meanwhile a painful dispute had broken out between Leibniz and the disciples of Locke and Newton, in which the English, and perhaps Newton himself, were much to blame, and Leibniz thought it impolitic to publish his book. It was not issued until long after his death, in the middle of the century.

The discussion with Locke was a failure: Locke would not play, and the book in which the whole controversy was to be systematized never appeared. The discussion with Bayle, on the other hand, was a model of what a discussion should be. Bayle played up tirelessly, and was never embarrassingly profound; he provided just the sort of objections most useful

for drawing forth illuminating expositions; he was as good as a fictitious character in a philosophical dialogue. And the book in which the controversy was systematized duly appeared with great éclat.

Here is the history of the controversy. In 1695 Leibniz was forty-nine years old. He had just emerged from a period of close employment under his prince's commands, and he thought fit to try his metaphysical principles upon the polite world and see what would come of it. He therefore published an article in the *Journal des Savants* under the title: 'New System of Nature and of the Communication of Substances, as well as of the Union between Soul and Body'. In the same year Foucher published an article in the *Journal* controverting Leibniz; and in the next year Leibniz replied with an 'Explanation'. A second explanation in the same year appeared in Basnage's *Histoire des Ouvrages des Savants*, in answer to reflexions by the editor. M. Pierre Bayle had all these articles before him when he inserted a note on Leibniz' doctrine in his article on 'Rorarius', in the first edition of his *Historical and Critical Dictionary*. The point of connexion between Rorarius and Leibniz was no more than this, that both held views about the souls of beasts.

Pierre Bayle was the son of a Calvinist pastor, early converted to Catholicism, but recovered to his old faith after a short time. He held academic employments in Switzerland and Holland; he promoted and edited the *Nouvelles de la République des Lettres*, and he produced that extraordinary work the *Historical and Critical Dictionary.* The notices it contains of authors and thinkers are little more than pegs upon which Bayle could hang his philosophical reflexions. He could write an intelligent discussion on any opinion; what he could not do was to reconcile the points of view from which he felt impelled to write upon this author and that. His was not a systematic mind. So far as he had a philosophical opinion, he was a Cartesian; in theology he was an orthodox Calvinist. He could not

reconcile his theology with his Cartesianism and he did not try to. He made a merit of the oppositions of faith to reason and reason to itself, so that he could throw himself upon a meritorious and voluntary faith.

There is nothing original in this position. It was characteristic of decadent scholasticism, it squared with Luther's exaggerations about the impotence of reason in fallen man, and Pascal had given his own highly personal twist to it. Bayle has been hailed as a forerunner of Voltairean scepticism. It would be truer to say that a Voltairean sceptic could read Bayle's discussions in his own sense and for his own purposes if he wished. But Bayle was not a sceptic. It is hard to say what he was; his whole position as between faith and reason is hopelessly confused. He was a scholar, a wit, and a philosophical sparring-partner of so perfectly convenient a kind that if we had not evidence of his historical reality, we might have suspected Leibniz of inventing him.

In the first edition of his *Dictionary*, under the article 'Rorarius', Bayle gave a very fair account of Leibniz' doctrine concerning the souls of animals, as it could be collected from his article in the *Journal des Savants*, 27 June 1695. He then proceeded to comment upon it in the following terms:

'There are some things in Mr. Leibniz' hypothesis that are liable to some difficulties, though they show the great extent of his genius. He will have it, for example, that the soul of a dog acts independently of outward bodies; that *it stands upon its own bottom, by a perfect* spontaneity *with respect to itself, and yet with a perfect* conformity *to outward things*.... That *its internal perceptions arise from its original constitution, that is to say, the representative constitution (capable of expressing beings outside itself in relation to its organs) which was bestowed upon it from the time of its creation, and makes its individual character* (*Journal des Savants*, 4 July 1695). From whence it results that it would feel hunger and thirst at such

and such an hour, though there were not any one body in the universe, and *though nothing should exist but God and that soul*. He has explained (*Histoire des Ouvrages des Savants*, Feb. 1696) his thought by the example of two pendulums that should perfectly agree: that is, he supposes that according to the particular laws which put the soul upon action, it must feel hunger at such an hour; and that according to the particular laws which direct the motion of matter, the body which is united to that soul must be modified at that same hour as it is modified when the soul is hungry. I will forbear preferring this system to that of occasional causes till the learned author has perfected it. I cannot apprehend the connexion of internal and spontaneous actions which would have this effect, that the soul of a dog would feel pain immediately after having felt joy, though it were alone in the universe. I understand why a dog passes immediately from pleasure to pain when, being very hungry and eating a piece of bread, he is suddenly struck with a cudgel. But I cannot apprehend that his soul should be so framed that at the very moment of his being beaten he should feel pain though he were not beaten, and though he should continue to eat bread without any trouble or hindrance. Nor do I see how the spontaneity of that soul should be consistent with the sense of pain, and in general with any unpleasing perceptions.

'Besides, the reason why this learned man does not like the Cartesian system seems to me to be a false supposition; for it cannot be said that the system of occasional causes brings in God acting by a miracle (ibid.), *Deum ex machina*, in the mutual dependency of the body and soul: for since God does only intervene according to general laws, he cannot be said to act in an extraordinary manner. Does the internal and active virtue communicated to the forms of bodies according to M. Leibniz know the train of actions which it is to produce? By no means; for we know by experience that we are ignorant whether we shall have such and such perceptions in an hour's time.

It were therefore necessary that the forms should be directed by some internal principle in the production of their acts. But this would be *Deus ex machina,* as much as in the system of occasional causes. In fine, as he supposes with great reason that all souls are simple and indivisible, it cannot be apprehended how they can be compared with a pendulum, that is, how by their original constitution they can diversify their operations by using the spontaneous activity bestowed upon them by their Creator. It may clearly be conceived that a simple being will always act in a uniform manner, if no external cause hinders it. If it were composed of several pieces, as a machine, it would act different ways, because the peculiar activity of each piece might change every moment the progress of others; but how will you find in a simple substance the cause of a change of operation?'

Leibniz published a reply to Bayle in the *Histoire des Ouvrages des Savants* for July 1698. As in all his references to Bayle, he is studiously polite and repays compliment for compliment. The following are perhaps the principal points of his answer.

1. On the example of the dog:

(*a*) How should it of itself change its sentiment, since everything left to itself continues in the state in which it is? Because the state may be a state of *change*, as in a moving body which, unless hindered, continues to move. And such is the nature of simple substances — they continue to evolve steadily.

(*b*) Would it really feel as though beaten if it were not beaten, since Leibniz says that the action of every substance takes place as though nothing existed but God and itself? Leibniz replies that his remark refers to the causality behind an action, not to the reasons for it. The spontaneous action of the dog, which leads to the feeling of pain, is only decreed to be

what it is, for the reason that the dog is part of a world of mutually reflecting substances, a world which also includes the cudgel.

(*c*) Why should the dog ever be displeased *spontaneously*? Leibniz distinguishes the spontaneous from the voluntary: many things occur in the mind, of itself, but not chosen by it.

2. On Cartesianism and miracle:

Cartesianism in the form of occasionalism *does* involve miracle, for though God is said by it to act according to laws in conforming body and mind to one another, he thereby causes them to act beyond their natural capacities.

3. On the problem, how can the simple act otherwise than uniformly?

Leibniz distinguishes: some uniform action is monotonous, but some is not. A point moves uniformly in describing a parabola, for it constantly fulfils the formula of the curve. But it does not move monotonously, for the curve constantly varies. Such is the uniformity of the action of simple substances.

Bayle read this reply, and was pleased but not satisfied with it. In the second edition of the dictionary, under the same article 'Rorarius', he added the following note:

'I declare first of all that I am very glad I have proposed some small difficulties against the system of that great philosopher, since they have occasioned some answers whereby that subject has been made clearer to me, and which have given me a more distinct notion of what is most to be admired in it. I look now upon that new system as an important conquest, which enlarges the bounds of philosophy. We had only two hypotheses, that of the Schools and that of the Cartesians: the one was a *way of influence* of the body upon the soul and of the soul upon the body; the other was a *way of assistance* or occasional causality. But here is a new acquisition, a new hypothesis, which may be called, as Fr. Lami styles it, a *way of pre-*

established harmony. We are beholden for it to M. Leibniz, and it is impossible to conceive anything that gives us a nobler idea of the power and wisdom of the Author of all things. This, together with the advantage of setting aside all notions of a miraculous conduct, would engage me to prefer this new system to that of the Cartesians, if I could conceive any possibility in the *way of pre-established harmony*.

'I desire the reader to take notice that though I confess that this way removes all notions of a miraculous conduct, yet I do not retract what I have said formerly, that the system of occasional causes does not bring in God acting miraculously. (See M. Leibniz' article in *Histoire des Ouvrages des Savants*, July 1698.) I am as much persuaded as ever I was that an action cannot be said to be miraculous, unless God produces it as an exception to the general laws; and that everything of which he is immediately the author according to those laws is distinct from a miracle properly so called. But being willing to cut off from this dispute as many things as I possibly can, I consent it should be said that the surest way of removing all notions that include a miracle is to suppose that all created substances are actively the immediate causes of the effects of nature. I will therefore lay aside what I might reply to that part of M. Leibniz' answer.

'I will also omit all objections which are not more contrary to his opinion than to that of some other philosophers. I will not therefore propose the difficulties that may be raised against the supposition that a creature can receive from God the power of moving itself. They are strong and almost unanswerable, but M. Leibniz' system does not lie more open to them than that of the Aristotelians; nay, I do not know whether the Cartesians would presume to say that God cannot communicate to our souls a power of acting. If they say so, how can they own that Adam sinned? And if they dare not say so they weaken the arguments whereby they endeavour to prove that matter is not capable of any activity. Nor do I believe that it is

more difficult for M. Leibniz than for the Cartesians or other philosophers, to free himself from the objection of a fatal mechanism which destroys human liberty. Wherefore, waiving this, I shall only speak of what is peculiar to the system of the *pre-established harmony*.

'I. My first observation shall be, that it raises the power and wisdom of the divine art above everything that can be conceived. Fancy to yourself a ship which, without having any sense or knowledge, and without being directed by any created or uncreated being, has the power of moving itself so seasonably as to have always the wind favourable, to avoid currents and rocks, to cast anchor where it ought to be done, and to retire into a harbour precisely when it is necessary. Suppose such a ship sails in that manner for several years successively, being always turned and situated as it ought to be, according to the several changes of the air and the different situations of seas and lands; you will acknowledge that God, notwithstanding his infinite power, cannot communicate such a faculty to a ship; or rather you will say that the nature of a ship is not capable of receiving it from God. And yet what M. Leibniz supposes about the machine of a human body is more admirable and more surprising than all this. Let us apply his system concerning the union of the soul with the body to the person of Julius Caesar.

'II. We must say according to this system that the body of Julius Caesar did so exercise its moving faculty that from its birth to its death it went through continual changes which did most exactly answer the perpetual changes of a certain soul which it did not know and which made no impression on it. We must say that the rule according to which that faculty of Caesar's body performed such actions was such, that he would have gone to the Senate upon such a day and at such an hour, that he would have spoken there such and such words, etc. though God had willed to annihilate his soul the next day after it was created. We must say that this moving

power did change and modify itself exactly according to the volubility of the thoughts of that ambitious man, and that it was affected precisely in a certain manner rather than in another, because the soul of Caesar passed from a certain thought to another. Can a blind power modify itself so exactly by virtue of an impression communicated thirty or forty years before and never renewed since, but left to itself, without ever knowing what it is to do? Is not this much more incomprehensible than the navigation I spoke of in the foregoing paragraph?

'III. The difficulty will be greater still, if it be considered that the human machine contains an almost infinite number of organs, and that it is continually exposed to the shock of the bodies that surround it, and which by an innumerable variety of shakings produce in it a thousand sorts of modifications. How is it possible to conceive that this *pre-established harmony* should never be disordered, but go on still during the longest life of a man, notwithstanding the infinite varieties of the reciprocal action of so many organs upon one another, which are surrounded on all sides with infinite corpuscles, sometimes hot and sometimes cold, sometimes dry and sometimes moist, and always acting, and pricking the nerves a thousand different ways? Suppose that the multiplicity of organs and of external agents be a necessary instrument of the almost infinite variety of changes in a human body: will that variety have the exactness here required? Will it never disturb the correspondence of those changes with the changes of the soul? This seems to be altogether impossible.

'According to M. Leibniz what is active in every substance ought to be reduced to a true unity. Since therefore the body of every man is composed of several substances, each of them ought to have a principle of action really distinct from the principle of each of the others. He will have the action of every principle to be spontaneous. Now this must vary the effects *ad infinitum*, and confound them. For the impression of the neighbouring

bodies must needs put some constraint upon the natural spontaneity of every one of them.'

'IV. It is in vain to have recourse to the power of God, in order to maintain that brutes are mere machines; it is in vain to say that God was able to make machines so artfully contrived that the voice of a man, the reflected light of an object, etc. will strike them exactly where it is necessary, that they may move in a given manner. This supposition is rejected by everybody except some Cartesians; and no Cartesian would admit it if it were to be extended to man; that is, if anyone were to assert that God was able to form such bodies as would mechanically do whatever we see other men do. By denying this we do not pretend to limit the power and knowledge of God: we only mean that the nature of things does not permit that the faculties imparted to a creature should not be necessarily confined within certain bounds. The actions of creatures must be necessarily proportioned to their essential state, and performed according to the character belonging to each machine; for according to the maxim of the philosophers, whatever is received is proportionate to the capacity of the subject that receives it. We may therefore reject M. Leibniz' hypothesis as being impossible, since it is liable to greater difficulties than that of the Cartesians, which makes beasts to be mere machines. It puts a perpetual harmony between two beings, which do not act one upon another; whereas if servants were mere machines, and should punctually obey their masters' command, it could not be said that they do it without a real action of their masters upon them; for their masters would speak words and make signs which would really shake and move the organs of the servants.

'V. Now let us consider the soul of Julius Caesar, and we shall find the thing more impossible still. That soul was in the world without being exposed to the influence of any spirit. The power it received from God was the only principle of the actions it produced at every moment: and if those

actions were different one from another, it was not because some of them were produced by the united influence of some springs which did not contribute to the production of others, for the soul of man is simple, indivisible and immaterial. M. Leibniz owns it; and if he did not acknowledge it, but if, on the contrary, he should suppose with most philosophers and some of the most excellent metaphysicians of our age (Mr. Locke, for instance) that a compound of several material parts placed and disposed in a certain manner, is capable of thinking, his hypothesis would appear to be on that very ground absolutely impossible, and I could refute it several other ways; which I need not mention since he acknowledges the immateriality of our soul and builds upon it.

'Let us return to the soul of Julius Caesar, and call it an immaterial automaton (M. Leibniz' own phrase), and compare it with an atom of Epicurus; I mean an atom surrounded with a vacuum on all sides, and which will never meet any other atom. This is a very just comparison: for this atom, on the one hand, has a natural power of moving itself and exerts it without any assistance, and without being retarded or hindered by anything: and, on the other hand, the soul of Caesar is a spirit which has received the faculty of producing thoughts, and exerts it without the influence of any other spirit or of any body. It is neither assisted nor thwarted by anything whatsoever. If you consult the common notions and the ideas of order, you will find that this atom can never stop, and that having been in motion in the foregoing moment, it will continue in it at the present moment and in all the moments that shall follow, and that it will always move in the same manner. This is the consequence of an axiom approved by M. Leibniz: *since a thing does always remain in the same state wherein it happens to be, unless it receives some alteration from some other thing... we conclude*, says he, *not only that a body which is at rest will always be at rest, but that a body in motion will always keep that motion or change, that is, the same swiftness*

and the same direction, unless something happens to hinder it. (M. Leibniz, ibid.)

‘Everyone clearly sees that this atom, whether it moves by an innate power, as Democritus and Epicurus would have it, or by a power received from the Creator, will always move in the same line equally and after a uniform manner, without ever turning or going back. Epicurus was laughed at, when he invented the motion of declination; it was a needless supposition, which he wanted in order to get out of the labyrinth of a fatal necessity; and he could give no reason for this new part of his system. It was inconsistent with the clearest notions of our minds: for it is evident that an atom which describes a straight line for the space of two days cannot turn away at the beginning of a third, unless it meets with some obstacle, or has a mind all of a sudden to go out of its road, or contains some spring which begins to play at that very moment. The first of these reasons cannot be admitted in a vacuum. The second is impossible, since an atom has not the faculty of thinking. And the third is likewise impossible in a corpuscle that is a perfect unity. I must make some use of all this.

‘VI. Caesar’s soul is a being to which unity belongs in a strict sense. The faculty of producing thoughts is a property of its nature (so M. Leibniz), which it has received from God, both as to possession and exercise. If the first thought it produces is a sense of pleasure, there is no reason why the second should not likewise be a sense of pleasure; for when the total cause of an effect remains the same, the effect cannot be altered. Now this soul, at the second moment of its existence, does not receive a new faculty of thinking; it only preserves the faculty it had at the first moment, and it is as independent of the concourse of any other cause at the second moment as it was at the first. It must therefore produce again at the second moment the same thought it had produced just before. If it be objected that it ought to be in a state of change, and that it would not be in such a state, in the case that

I have supposed; I answer that its change will be like the change of the atom; for an atom which continually moves in the same line acquires a new situation at every moment, but it is like the preceding situation. A soul may therefore continue in its state of change, if it does but produce a new thought like the preceding.

'But suppose it to be not confined within such narrow bounds; it must be granted at least that its going from one thought to another implies some reason of affinity. If I suppose that in a certain moment the soul of Caesar sees a tree with leaves and blossoms, I can conceive that it does immediately desire to see one that has only leaves, and then one that has only blossoms, and that it will thus successively produce several images arising from one another; but one cannot conceive the odd change of thoughts, which have no affinity with, but are even contrary to, one another, and which are so common in men's souls. One cannot apprehend how God could place in the soul of Julius Caesar the principle of what I am going to say. He was without doubt pricked with a pin more than once, when he was sucking; and therefore according to M. Leibniz' hypothesis which I am here considering, his soul must have produced in itself a sense of pain immediately after the pleasant sensations of the sweetness of the milk, which it had enjoyed for the space of two or three minutes. By what springs was it determined to interrupt its pleasures and to give itself all of a sudden a sense of pain, without receiving any intimation of preparing itself to change, and without any new alteration in its substance? If you run over the life of that Roman emperor, every page will afford you matter for a stronger objection than this is.

'VII. The thing would be less incomprehensible if it were supposed that the soul of man is not one spirit but rather a multitude of spirits, each of which has its functions, that begin and end precisely as the changes made in a human body require. By virtue of this supposition it should be said that

something analogous to a great number of wheels and springs, or of matters that ferment, disposed according to the changes of our machine, awakens or lulls asleep for a certain time the action of each of those spirits. But then the soul of man would be no longer a single substance but an *ens per aggregationem*, a collection and heap of substances just like all material beings. We are here in quest of a single being, which produces in itself sometimes joy, sometimes pain, etc. and not of many beings, one of which produces hope, another despair, etc.

'In these observations I have merely cleared and unfolded those which M. Leibniz has done me the honour to examine: and now I shall make some reflexions upon his answers.

'VIII. He says (ibid.) that *the law of the change which happens in the substance of the animal transports him from pleasure to pain at the very moment that a solution of continuity is made in his body; because the law of the indivisible substance of that animal is to represent what is done in his body as we experience it, and even to represent in some manner, and with respect to that body, whatever is done in the world*. These words are a very good explication of the grounds of this system; they are, as it were, the unfolding and key of it; but at the same time they are the very things at which the objections of those who take this system to be impossible are levelled. The law M. Leibniz speaks of supposes a decree of God, and shows wherein this system agrees with that of occasional causes. Those two systems agree in this point, that there are laws according to which the soul of man is *to represent what is done in the body of man, as we experience it*. But they disagree as to the manner of executing those laws. The Cartesians say that God executes them; M. Leibniz will have it, that the soul itself does it; which appears to me impossible, because the soul has not the necessary instruments for such an execution. Now however infinite the power and knowledge of God be, he cannot perform with a machine deprived of a

certain piece, what requires the concourse of such a piece. He must supply that defect; but then the effect would be produced by him and not by the machine. I shall show that the soul has not the instruments requisite for the divine law we speak of, and in order to do it I shall make use of a comparison.

'Fancy to yourself an animal created by God and designed to sing continually. It will always sing, that is most certain; but if God designs him a certain tablature, he must necessarily either put it before his eyes or imprint it upon his memory or dispose his muscles in such a manner that according to the laws of mechanism one certain note will always come after another, agreeably to the order of the tablature. Without this one cannot apprehend that the animal can always follow the whole set of the notes appointed him by God. Let us apply this to man's soul. M. Leibniz will have it that it has received not only the power of producing thoughts continually, but also the faculty of following always a certain set of thoughts, which answers the continual changes that happen in the machine of the body. This set of thoughts is like the tablature prescribed to the singing animal above mentioned. Can the soul change its perceptions or modifications at every moment according to such a set of thoughts, without knowing the series of the notes, and actually thinking upon them? But experience teaches us that it knows nothing of it. Were it not at least necessary that in default of such a knowledge, there should be in the soul a set of particular instruments, each of which would be a necessary cause of such and such a thought? Must they not be so placed and disposed as to operate precisely one after another, according to the correspondence *pre-established* between the changes of the body and the thoughts of the soul? but it is most certain that an immaterial simple and indivisible substance cannot be made up of such an innumerable multitude of particular instruments placed one before another, according to the order of the

tablature in question. It is not therefore possible that a human soul should execute that law.

'M. Leibniz supposes that the soul does not distinctly know its future perceptions, *but that it perceives them confusedly*, and that *there are in each substance traces of whatever hath happened, or shall happen to it: but that an infinite multitude of perceptions hinders us from distinguishing them. The present state of each substance is a natural consequence of its preceding state. The soul, though never so simple, has always a sentiment composed of several perceptions at one time: which answers our end as well as though it were composed of pieces, like a machine. For each foregoing perception has an influence on those that follow agreeably to a law of order, which is in perceptions as well as in motions...The perceptions that are together in one and the same soul at the same time, including an infinite multitude of little and indistinguishable sentiments that are to be unfolded, we need not wonder at the infinite variety of what is to result from it in time. This is only a consequence of the representative nature of the soul, which is, to express what happens and what will happen in its body, by the connexion and correspondence of all the parts of the world*. I have but little to say in answer to this: I shall only observe that this supposition when sufficiently cleared is the right way of solving all the difficulties. M. Leibniz, through the penetration of his great genius, has very well conceived the extent and strength of this objection, and what remedy ought to be applied to the main inconveniency. I do not doubt but that he will smooth the rough parts of his system, and teach us some excellent things about the nature of spirits. Nobody can travel more usefully or more safely than he in the intellectual world. I hope that his curious explanations will remove all the impossibilities which I have hitherto found in his system, and that he will solidly remove my difficulties, as well as those of Father Lami. And these hopes made me say before, without designing to pass a

compliment upon that learned man, that his system ought to be looked upon as an important conquest.

'He will not be much embarrassed by this, viz. that whereas according to the supposition of the Cartesians there is but one general law for the union of spirits and bodies, he will have it that God gives a particular law to each spirit; from whence it seems to result that the primitive constitution of each spirit is specifically different from all others. Do not the Thomists say, that there are as many species as individuals in angelic nature?'

Leibniz acknowledged Bayle's note in a further reply, which is written as though for publication. It was communicated to Bayle, but it was not in fact published. It is dated 1702. It may be found in the standard collections of Leibniz' philosophical works. It reads almost like a sketch for the *Theodicy*.

The principal point developed by Leibniz is the richness of content which, according to him, is to be found in each 'simple substance'. Its simplicity is more like the infinitely rich simplicity of the divine Being, than like the simplicity of the atom of Epicurus, with which Bayle had chosen to compare it. It contains a condensation in confused idea of the whole universe: and its essence is from the first defined by the part it is to play in the total harmony.

As to the musical score ('tablature of notes') which the individual soul plays from, in order to perform its ordained part in the universal harmony, this 'score' is to be found in the confused or implicit ideas at any moment present, from which an omniscient observer could always deduce what is to happen next. To the objection 'But the created soul is not an omniscient observer, and if it cannot read the score, the score is useless to it', Leibniz replies by affirming that much spontaneous action arises from subjective and yet unperceived reasons, as we are all perfectly aware, once we attend to the relevant facts. All he claims to be doing is to generalize this observation. All events whatsoever arise from the 'interpretation of the

score' by monads, but very little of this 'interpretation' is in the least conscious.

Leibniz passes from the remarks about his own doctrine under the article 'Rorarius' to other articles of Bayle's dictionary, and touches the question of the origin of evil, and other matters which receive their fuller treatment in the *Theodicy*.

In the same year Leibniz wrote a very friendly letter to Bayle himself, offering further explanations of disputed points. He concluded it with a paragraph of some personal interest, comparing himself the historian-philosopher with Bayle the philosophic lexicographer, and revealing by the way his attitude to philosophy, science and history:

'We have good reason to admire, Sir, the way in which your striking reflexions on the deepest questions of philosophy remain unhindered by your boundless researches into matters of fact. I too am not always able to excuse myself from discussions of the sort, and have even been obliged to descend to questions of genealogy, which would be still more trifling, were it not that the interests of States frequently depend upon them. I have worked much on the history of Germany in so far as it bears upon these countries, a study which has furnished me with some observations belonging to general history. So I have learnt not to neglect the knowledge of sheer facts. But if the choice were open to me, I should prefer natural history to political, and the customs and laws God has established in nature, to what is observed among mankind.'

Leibniz now conceived the idea of putting together all the passages in Bayle's works which interested him, and writing a systematic answer to them. Before he had leisure to finish the task, Bayle died. The work nevertheless appeared in 1710 as the Essays in *Theodicy*.

PREFACE

IT HAS EVER been seen that men in general have resorted to outward forms for the expression of their religion: sound piety, that is to say, light and virtue, has never been the portion of the many. One should not wonder at this, nothing is so much in accord with human weakness. We are impressed by what is outward, while the inner essence of things requires consideration of such a kind as few persons are fitted to give. As true piety consists in principles and practice, the outward forms of religion imitate these, and are of two kinds: the one kind consists in ceremonial practices, and the other in the formularies of belief. Ceremonies resemble virtuous actions, and formularies are like shadows of the truth and approach, more or less, the true light. All these outward forms would be commendable if those who invented them had rendered them appropriate to maintain and to express that which they imitate — if religious ceremonies, ecclesiastical discipline, the rules of communities, human laws were always like a hedge round the divine law, to withdraw us from any approach to vice, to inure us to the good and to make us familiar with virtue. That was the aim of Moses and of other good lawgivers, of the wise men who founded religious orders, and above all of Jesus Christ, divine founder of the purest and most enlightened religion. It is just the same with the formularies of belief: they would be valid provided there were nothing in them inconsistent with truth unto salvation, even though the full truth concerned were not there. But it happens only too often that religion is choked in ceremonial, and that the divine light is obscured by the opinions of men.

The pagans, who inhabited the earth before Christianity was founded, had only one kind of outward form: they had ceremonies in their worship,

but they had no articles of faith and had never dreamed of drawing up formularies for their dogmatic theology. They knew not whether their gods were real persons or symbols of the forces of Nature, as the sun, the planets, the elements. Their mysteries consisted not in difficult dogmas but in certain secret observances, whence the profane, namely those who were not initiated, were excluded. These observances were very often ridiculous and absurd, and it was necessary to conceal them in order to guard them against contempt. The pagans had their superstitions: they boasted of miracles, everything with them was full of oracles, auguries, portents, divinations; the priests invented signs of the anger or of the goodness of the gods, whose interpreters they claimed to be. This tended to sway minds through fear and hope concerning human events; but the great future of another life was scarce envisaged; one did not trouble to impart to men true notions of God and of the soul.

Of all ancient peoples, it appears that the Hebrews alone had public dogmas for their religion. Abraham and Moses established the belief in one God, source of all good, author of all things. The Hebrews speak of him in a manner worthy of the Supreme Substance; and one wonders at seeing the inhabitants of one small region of the earth more enlightened than the rest of the human race. Peradventure the wise men of other nations have sometimes said the same, but they have not had the good fortune to find a sufficient following and to convert the dogma into law. Nevertheless Moses had not inserted in his laws the doctrine of the immortality of souls: it was consistent with his ideas, it was taught by oral tradition; but it was not proclaimed for popular acceptance until Jesus Christ lifted the veil, and, without having force in his hand, taught with all the force of a lawgiver that immortal souls pass into another life, wherein they shall receive the wages of their deeds. Moses had already expressed the beautiful conceptions of the greatness and the goodness of God, whereto many civilized peoples to-day

assent; but Jesus Christ demonstrated fully the results of these ideas, proclaiming that divine goodness and justice are shown forth to perfection in God's designs for the souls of men.

I refrain from considering here the other points of the Christian doctrine, and I will show only how Jesus Christ brought about the conversion of natural religion into law, and gained for it the authority of a public dogma. He alone did that which so many philosophers had endeavoured in vain to do; and Christians having at last gained the upper hand in the Roman Empire, the master of the greater part of the known earth, the religion of the wise men became that of the nations. Later also Mahomet showed no divergence from the great dogmas of natural theology: his followers spread them abroad even among the most remote races of Asia and of Africa, whither Christianity had not been carried; and they abolished in many countries heathen superstitions which were contrary to the true doctrine of the unity of God and the immortality of souls.

It is clear that Jesus Christ, completing what Moses had begun, wished that the Divinity should be the object not only of our fear and veneration but also of our love and devotion. Thus he made men happy by anticipation, and gave them here on earth a foretaste of future felicity. For there is nothing so agreeable as loving that which is worthy of love. Love is that mental state which makes us take pleasure in the perfections of the object of our love, and there is nothing more perfect than God, nor any greater delight than in him. To love him it suffices to contemplate his perfections, a thing easy indeed, because we find the ideas of these within ourselves. The perfections of God are those of our souls, but he possesses them in boundless measure; he is an Ocean, whereof to us only drops have been granted; there is in us some power, some knowledge, some goodness, but in God they are all in their entirety. Order, proportions, harmony delight us; painting and music are samples of these: God is all order; he always keeps

truth of proportions, he makes universal harmony; all beauty is an effusion of his rays.

It follows manifestly that true piety and even true felicity consist in the love of God, but a love so enlightened that its fervour is attended by insight. This kind of love begets that pleasure in good actions which gives relief to virtue, and, relating all to God as to the centre, transports the human to the divine. For in doing one's duty, in obeying reason, one carries out the orders of Supreme Reason. One directs all one's intentions to the common good, which is no other than the glory of God. Thus one finds that there is no greater individual interest than to espouse that of the community, and one gains satisfaction for oneself by taking pleasure in the acquisition of true benefits for men. Whether one succeeds therein or not, one is content with what comes to pass, being once resigned to the will of God and knowing that what he wills is best. But before he declares his will by the event one endeavours to find it out by doing that which appears most in accord with his commands. When we are in this state of mind, we are not disheartened by ill success, we regret only our faults; and the ungrateful ways of men cause no relaxation in the exercise of our kindly disposition. Our charity is humble and full of moderation, it presumes not to domineer; attentive alike to our own faults and to the talents of others, we are inclined to criticize our own actions and to excuse and vindicate those of others. We must work out our own perfection and do wrong to no man. There is no piety where there is not charity; and without being kindly and beneficent one cannot show sincere religion.

Good disposition, favourable upbringing, association with pious and virtuous persons may contribute much towards such a propitious condition for our souls; but most securely are they grounded therein by good principles. I have already said that insight must be joined to fervour, that the perfecting of our understanding must accomplish the perfecting of our will.

The practices of virtue, as well as those of vice, may be the effect of a mere habit, one may acquire a taste for them; but when virtue is reasonable, when it is related to God, who is the supreme reason of things, it is founded on knowledge. One cannot love God without knowing his perfections, and this knowledge contains the principles of true piety. The purpose of religion should be to imprint these principles upon our souls: but in some strange way it has happened all too often that men, that teachers of religion have strayed far from this purpose. Contrary to the intention of our divine Master, devotion has been reduced to ceremonies and doctrine has been cumbered with formulae. All too often these ceremonies have not been well fitted to maintain the exercise of virtue, and the formulae sometimes have not been lucid. Can one believe it? Some Christians have imagined that they could be devout without loving their neighbour, and pious without loving God; or else people have thought that they could love their neighbour without serving him and could love God without knowing him. Many centuries have passed without recognition of this defect by the people at large; and there are still great traces of the reign of darkness. There are divers persons who speak much of piety, of devotion, of religion, who are even busied with the teaching of such things, and who yet prove to be by no means versed in the divine perfections. They ill understand the goodness and the justice of the Sovereign of the universe; they imagine a God who deserves neither to be imitated nor to be loved. This indeed seemed to me dangerous in its effect, since it is of serious moment that the very source of piety should be preserved from infection. The old errors of those who arraigned the Divinity or who made thereof an evil principle have been renewed sometimes in our own days: people have pleaded the irresistible power of God when it was a question rather of presenting his supreme goodness; and they have assumed a despotic power when they should rather have conceived of a power ordered by the most perfect wisdom. I have

observed that these opinions, apt to do harm, rested especially on confused notions which had been formed concerning freedom, necessity and destiny; and I have taken up my pen more than once on such an occasion to give explanations on these important matters. But finally I have been compelled to gather up my thoughts on all these connected questions, and to impart them to the public. It is this that I have undertaken in the Essays which I offer here, on the Goodness of God, the Freedom of Man, and the Origin of Evil.

There are two famous labyrinths where our reason very often goes astray: one concerns the great question of the Free and the Necessary, above all in the production and the origin of Evil; the other consists in the discussion of continuity and of the indivisibles which appear to be the elements thereof, and where the consideration of the infinite must enter in. The first perplexes almost all the human race, the other exercises philosophers only. I shall have perchance at another time an opportunity to declare myself on the second, and to point out that, for lack of a true conception of the nature of substance and matter, people have taken up false positions leading to insurmountable difficulties, difficulties which should properly be applied to the overthrow of these very positions. But if the knowledge of continuity is important for speculative enquiry, that of necessity is none the less so for practical application; and it, together with the questions therewith connected, to wit, the freedom of man and the justice of God, forms the object of this treatise.

Men have been perplexed in well-nigh every age by a sophism which the ancients called the ‘Lazy Reason’, because it tended towards doing nothing, or at least towards being careful for nothing and only following inclination for the pleasure of the moment. For, they said, if the future is necessary, that which must happen will happen, whatever I may do. Now the future (so they said) is necessary, whether because the Divinity foresees everything,

and even pre-establishes it by the control of all things in the universe; or because everything happens of necessity, through the concatenation of causes; or finally, through the very nature of truth, which is determinate in the assertions that can be made on future events, as it is in all assertions, since the assertion must always be true or false in itself, even though we know not always which it is. And all these reasons for determination which appear different converge finally like lines upon one and the same centre; for there is a truth in the future event which is predetermined by the causes, and God pre-establishes it in establishing the causes.

The false conception of necessity, being applied in practice, has given rise to what I call *Fatum Mahometanum*, fate after the Turkish fashion, because it is said of the Turks that they do not shun danger or even abandon places infected with plague, owing to their use of such reasoning as that just recorded. For what is called *Fatum Stoicum* was not so black as it is painted: it did not divert men from the care of their affairs, but it tended to give them tranquillity in regard to events, through the consideration of necessity, which renders our anxieties and our vexations needless. In which respect these philosophers were not far removed from the teaching of our Lord, who deprecates these anxieties in regard to the morrow, comparing them with the needless trouble a man would give himself in labouring to increase his stature.

It is true that the teachings of the Stoics (and perhaps also of some famous philosophers of our time), confining themselves to this alleged necessity, can only impart a forced patience; whereas our Lord inspires thoughts more sublime, and even instructs us in the means of gaining contentment by assuring us that since God, being altogether good and wise, has care for everything, even so far as not to neglect one hair of our head, our confidence in him ought to be entire. And thus we should see, if we were capable of understanding him, that it is not even possible to wish for

anything better (as much in general as for ourselves) than what he does. It is as if one said to men: Do your duty and be content with that which shall come of it, not only because you cannot resist divine providence, or the nature of things (which may suffice for tranquillity, but not for contentment), but also because you have to do with a good master. And that is what may be called *Fatum Christianum*.

Nevertheless it happens that most men, and even Christians, introduce into their dealings some mixture of fate after the Turkish fashion, although they do not sufficiently acknowledge it. It is true that they are not inactive or negligent when obvious perils or great and manifest hopes present themselves; for they will not fail to abandon a house that is about to fall and to turn aside from a precipice they see in their path; and they will burrow in the earth to dig up a treasure half uncovered, without waiting for fate to finish dislodging it. But when the good or the evil is remote and uncertain and the remedy painful or little to our taste, the lazy reason seems to us to be valid. For example, when it is a question of preserving one's health and even one's life by good diet, people to whom one gives advice thereupon very often answer that our days are numbered and that it avails nothing to try to struggle against that which God destines for us. But these same persons run to even the most absurd remedies when the evil they had neglected draws near. One reasons in somewhat the same way when the question for consideration is somewhat thorny, as for instance when one asks oneself, *quod vitae sectabor iter*? what profession one must choose; when it is a question of a marriage being arranged, of a war being undertaken, of a battle being fought; for in these cases many will be inclined to evade the difficulty of consideration and abandon themselves to fate or to inclination, as if reason should not be employed except in easy cases. One will then all too often reason in the Turkish fashion (although this way is wrongly termed trusting in providence, a thing that in reality

occurs only when one has done one's duty) and one will employ the lazy reason, derived from the idea of inevitable fate, to relieve oneself of the need to reason properly. One will thus overlook the fact that if this argument contrary to the practice of reason were valid, it would always hold good, whether the consideration were easy or not. This laziness is to some extent the source of the superstitious practices of fortune-tellers, which meet with just such credulity as men show towards the philosopher's stone, because they would fain have short cuts to the attainment of happiness without trouble.

I do not speak here of those who throw themselves upon fortune because they have been happy before, as if there were something permanent therein. Their argument from the past to the future has just as slight a foundation as the principles of astrology and of other kinds of divination. They overlook the fact that there is usually an ebb and flow in fortune, *una marea*, as Italians playing basset are wont to call it. With regard to this they make their own particular observations, which I would, nevertheless, counsel none to trust too much. Yet this confidence that people have in their fortune serves often to give courage to men, and above all to soldiers, and causes them to have indeed that good fortune they ascribe to themselves. Even so do predictions often cause that to happen which has been foretold, as it is supposed that the opinion the Mahometans hold on fate makes them resolute. Thus even errors have their use at times, but generally as providing a remedy for other errors: and truth is unquestionably better.

But it is taking an unfair advantage of this alleged necessity of fate to employ it in excuse for our vices and our libertinism. I have often heard it said by smart young persons, who wished to play the freethinker, that it is useless to preach virtue, to censure vice, to create hopes of reward and fears of punishment, since it may be said of the book of destiny, that what is written is written, and that our behaviour can change nothing therein. Thus,

they would say, it were best to follow one's inclination, dwelling only upon such things as may content us in the present. They did not reflect upon the strange consequences of this argument, which would prove too much, since it would prove (for instance) that one should take a pleasant beverage even though one knows it is poisoned. For the same reason (if it were valid) I could say: if it is written in the records of the Parcae that poison will kill me now or will do me harm, this will happen even though I were not to take this beverage; and if this is not written, it will not happen even though I should take this same beverage; consequently I shall be able to follow with impunity my inclination to take what is pleasing, however injurious it may be; the result of which reasoning is an obvious absurdity. This objection disconcerted them a little, but they always reverted to their argument, phrased in different ways, until they were brought to understand where the fault of the sophism lies. It is untrue that the event happens whatever one may do: it will happen because one does what leads thereto; and if the event is written beforehand, the cause that will make it happen is written also. Thus the connexion of effects and causes, so far from establishing the doctrine of a necessity detrimental to conduct, serves to overthrow it.

Yet, without having evil intentions inclined towards libertinism, one may envisage differently the strange consequences of an inevitable necessity, considering that it would destroy the freedom of the will, so essential to the morality of action: for justice and injustice, praise and blame, punishment and reward cannot attach to necessary actions, and nobody will be under obligation to do the impossible or to abstain from doing what is absolutely necessary. Without any intention of abusing this consideration in order to favour irregularity, one will nevertheless not escape embarrassment sometimes, when it comes to a question of judging the actions of others, or rather of answering objections, amongst which there are some even concerned with the actions of God, whereof I will speak presently. And as

an insuperable necessity would open the door to impiety, whether through the impunity one could thence infer or the hopelessness of any attempt to resist a torrent that sweeps everything along with it, it is important to note the different degrees of necessity, and to show that there are some which cannot do harm, as there are others which cannot be admitted without giving rise to evil consequences.

Some go even further: not content with using the pretext of necessity to prove that virtue and vice do neither good nor ill, they have the hardihood to make the Divinity accessary to their licentious way of life, and they imitate the pagans of old, who ascribed to the gods the cause of their crimes, as if a divinity drove them to do evil. The philosophy of Christians, which recognizes better than that of the ancients the dependence of things upon the first Author and his co-operation with all the actions of creatures, appears to have increased this difficulty. Some able men in our own time have gone so far as to deny all action to creatures, and M. Bayle, who tended a little towards this extraordinary opinion, made use of it to restore the lapsed dogma of the two principles, or two gods, the one good, the other evil, as if this dogma were a better solution to the difficulties over the origin of evil. Yet again he acknowledges that it is an indefensible opinion and that the oneness of the Principle is incontestably founded on *a priori* reasons; but he wishes to infer that our Reason is confounded and cannot meet her own objections, and that one should disregard them and hold fast the revealed dogmas, which teach us the existence of one God altogether good, altogether powerful and altogether wise. But many readers, convinced of the irrefutable nature of his objections and believing them to be at least as strong as the proofs for the truth of religion, would draw dangerous conclusions.

Even though there were no co-operation by God in evil actions, one could not help finding difficulty in the fact that he foresees them and that,

being able to prevent them through his omnipotence, he yet permits them. This is why some philosophers and even some theologians have rather chosen to deny to God any knowledge of the detail of things and, above all, of future events, than to admit what they believed repellent to his goodness. The Socinians and Conrad Vorstius lean towards that side; and Thomas Bonartes, an English Jesuit disguised under a pseudonym but exceedingly learned, who wrote a book *De Concordia Scientiae cum Fide*, of which I will speak later, appears to hint at this also.

They are doubtless much mistaken; but others are not less so who, convinced that nothing comes to pass save by the will and the power of God, ascribe to him intentions and actions so unworthy of the greatest and the best of all beings that one would say these authors have indeed renounced the dogma which recognizes God's justice and goodness. They thought that, being supreme Master of the universe, he could without any detriment to his holiness cause sins to be committed, simply at his will and pleasure, or in order that he might have the pleasure of punishing; and even that he could take pleasure in eternally afflicting innocent people without doing any injustice, because no one has the right or the power to control his actions. Some even have gone so far as to say that God acts thus indeed; and on the plea that we are as nothing in comparison with him, they liken us to earthworms which men crush without heeding as they walk, or in general to animals that are not of our species and which we do not scruple to ill-treat.

I believe that many persons otherwise of good intentions are misled by these ideas, because they have not sufficient knowledge of their consequences. They do not see that, properly speaking, God's justice is thus overthrown. For what idea shall we form of such a justice as has only will for its rule, that is to say, where the will is not guided by the rules of good and even tends directly towards evil? Unless it be the idea contained in that

tyrannical definition by Thrasymachus in Plato, which designated as *just* that which pleases the stronger. Such indeed is the position taken up, albeit unwittingly, by those who rest all obligation upon constraint, and in consequence take power as the gauge of right. But one will soon abandon maxims so strange and so unfit to make men good and charitable through the imitation of God. For one will reflect that a God who would take pleasure in the misfortune of others cannot be distinguished from the evil principle of the Manichaeans, assuming that this principle had become sole master of the universe; and that in consequence one must attribute to the true God sentiments that render him worthy to be called the good Principle.

Happily these extravagant dogmas scarce obtain any longer among theologians. Nevertheless some astute persons, who are pleased to make difficulties, revive them: they seek to increase our perplexity by uniting the controversies aroused by Christian theology to the disputes of philosophy. Philosophers have considered the questions of necessity, of freedom and of the origin of evil; theologians have added thereto those of original sin, of grace and of predestination. The original corruption of the human race, coming from the first sin, appears to us to have imposed a natural necessity to sin without the succour of divine grace: but necessity being incompatible with punishment, it will be inferred that a sufficient grace ought to have been given to all men; which does not seem to be in conformity with experience.

But the difficulty is great, above all, in relation to God's dispositions for the salvation of men. There are few saved or chosen; therefore the choice of many is not God's decreed will. And since it is admitted that those whom he has chosen deserve it no more than the rest, and are not even fundamentally less evil, the goodness which they have coming only from the gift of God, the difficulty is increased. Where is, then, his justice (people will say), or at the least, where is his goodness? Partiality, or respect of persons, goes

against justice, and he who without cause sets bounds to his goodness cannot have it in sufficient measure. It is true that those who are not chosen are lost by their own fault: they lack good will or living faith; but it rested with God alone to grant it them. We know that besides inward grace there are usually outward circumstances which distinguish men, and that training, conversation, example often correct or corrupt natural disposition. Now that God should call forth circumstances favourable to some and abandon others to experiences which contribute to their misfortune, will not that give us cause for astonishment? And it is not enough (so it seems) to say with some that inward grace is universal and equal for all. For these same authors are obliged to resort to the exclamations of St. Paul, and to say: 'O the depth!' when they consider how men are distinguished by what we may call outward graces, that is, by graces appearing in the diversity of circumstances which God calls forth, whereof men are not the masters, and which have nevertheless so great an influence upon all that concerns their salvation.

Nor will it help us to say with St. Augustine that, all men being involved in the damnation caused by the sin of Adam, God might have left them all in their misery; and that thus his goodness alone induces him to deliver some of them. For not only is it strange that the sin of another should condemn anyone, but there still remains the question why God does not deliver all — why he delivers the lesser number and why some in preference to others. He is in truth their master, but he is a good and just master; his power is absolute, but his wisdom permits not that he exercise that power in an arbitrary and despotic way, which would be tyrannous indeed.

Moreover, the fall of the first man having happened only with God's permission, and God having resolved to permit it only when once he had considered its consequences, which are the corruption of the mass of the

human race and the choice of a small number of elect, with the abandonment of all the rest, it is useless to conceal the difficulty by limiting one's view to the mass already corrupt. One must, in spite of oneself, go back to the knowledge of the consequences of the first sin, preceding the decree whereby God permitted it, and whereby he permitted simultaneously that the damned should be involved in the mass of perdition and should not be delivered: for God and the sage make no resolve without considering its consequences.

I hope to remove all these difficulties. I will point out that absolute necessity, which is called also logical and metaphysical and sometimes geometrical, and which would alone be formidable in this connexion, does not exist in free actions, and that thus freedom is exempt not only from constraint but also from real necessity. I will show that God himself, although he always chooses the best, does not act by an absolute necessity, and that the laws of nature laid down by God, founded upon the fitness of things, keep the mean between geometrical truths, absolutely necessary, and arbitrary decrees; which M. Bayle and other modern philosophers have not sufficiently understood. Further I will show that there is an indifference in freedom, because there is no absolute necessity for one course or the other; but yet that there is never an indifference of perfect equipoise. And I will demonstrate that there is in free actions a perfect spontaneity beyond all that has been conceived hitherto. Finally I will make it plain that the hypothetical and the moral necessity which subsist in free actions are open to no objection, and that the 'Lazy Reason' is a pure sophism.

Likewise concerning the origin of evil in its relation to God, I offer a vindication of his perfections that shall extol not less his holiness, his justice and his goodness than his greatness, his power and his independence. I show how it is possible for everything to depend upon God, for him to co-operate in all the actions of creatures, even, if you will, to

create these creatures continually, and nevertheless not to be the author of sin. Here also it is demonstrated how the privative nature of evil should be understood. Much more than that, I explain how evil has a source other than the will of God, and that one is right therefore to say of moral evil that God wills it not, but simply permits it. Most important of all, however, I show that it has been possible for God to permit sin and misery, and even to co-operate therein and promote it, without detriment to his holiness and his supreme goodness: although, generally speaking, he could have avoided all these evils.

Concerning grace and predestination, I justify the most debatable assertions, as for instance: that we are converted only through the prevenient grace of God and that we cannot do good except with his aid; that God wills the salvation of all men and that he condemns only those whose will is evil; that he gives to all a sufficient grace provided they wish to use it; that, Jesus Christ being the source and the centre of election, God destined the elect for salvation, because he foresaw that they would cling with a lively faith to the doctrine of Jesus Christ. Yet it is true that this reason for election is not the final reason, and that this very pre-vision is still a consequence of God's anterior decree. Faith likewise is a gift of God, who has predestinated the faith of the elect, for reasons lying in a superior decree which dispenses grace and circumstance in accordance with God's supreme wisdom.

Now, as one of the most gifted men of our time, whose eloquence was as great as his acumen and who gave great proofs of his vast erudition, had applied himself with a strange predilection to call attention to all the difficulties on this subject which I have just touched in general, I found a fine field for exercise in considering the question with him in detail. I acknowledge that M. Bayle (for it is easy to see that I speak of him) has on his side all the advantages except that of the root of the matter, but I hope

that truth (which he acknowledges himself to be on our side) by its very plainness, and provided it be fittingly set forth, will prevail over all the ornaments of eloquence and erudition. My hope for success therein is all the greater because it is the cause of God I plead, and because one of the maxims here upheld states that God's help is never lacking for those that lack not good will. The author of this discourse believes that he has given proof of this good will in the attention he has brought to bear upon this subject. He has meditated upon it since his youth; he has conferred with some of the foremost men of the time; and he has schooled himself by the reading of good authors. And the success which God has given him (according to the opinion of sundry competent judges) in certain other profound meditations, of which some have much influence on this subject, gives him peradventure some right to claim the attention of readers who love truth and are fitted to search after it.

The author had, moreover, particular and weighty reasons inducing him to take pen in hand for discussion of this subject. Conversations which he had concerning the same with literary and court personages, in Germany and in France, and especially with one of the greatest and most accomplished of princesses, have repeatedly prompted him to this course. He had had the honour of expressing his opinions to this Princess upon divers passages of the admirable *Dictionary* of M. Bayle, wherein religion and reason appear as adversaries, and where M. Bayle wishes to silence reason after having made it speak too loud: which he calls the triumph of faith. The present author declared there and then that he was of a different opinion, but that he was nevertheless well pleased that a man of such great genius had brought about an occasion for going deeply into these subjects, subjects as important as they are difficult. He admitted having examined them also for some long time already, and having sometimes been minded to publish upon this matter some reflexions whose chief aim should be such

knowledge of God as is needed to awaken piety and to foster virtue. This Princess exhorted and urged him to carry out his long-cherished intention, and some friends added their persuasions. He was all the more tempted to accede to their requests since he had reason to hope that in the sequel to his investigation M. Bayle's genius would greatly aid him to give the subject such illumination as it might receive with his support. But divers obstacles intervened, and the death of the incomparable Queen was not the least. It happened, however, that M. Bayle was attacked by excellent men who set themselves to examine the same subject; he answered them fully and always ingeniously. I followed their dispute, and was even on the point of being involved therein. This is how it came about.

I had published a new system, which seemed well adapted to explain the union of the soul and the body: it met with considerable applause even from those who were not in agreement with it, and certain competent persons testified that they had already been of my opinion, without having reached so distinct an explanation, before they saw what I had written on the matter. M. Bayle examined it in his *Historical and Critical Dictionary*, article 'Rorarius'. He thought that my expositions were worthy of further development; he drew attention to their usefulness in various connexions, and he laid stress upon what might still cause difficulty. I could not but reply in a suitable way to expressions so civil and to reflexions so instructive as his. In order to turn them to greater account, I published some elucidations in the *Histoire des Ouvrages des Savants*, July 1698. M. Bayle replied to them in the second edition of his *Dictionary*. I sent him a rejoinder which has not yet been published; I know not whether he ever made a further reply.

Meanwhile it happened that M. le Clerc had inserted in his *Select Library* an extract from the *Intellectual System* of the late Mr. Cudworth, and had explained therein certain 'plastic natures' which this admirable

author applied to the formation of animals. M. Bayle believed (see the continuation of *Divers Thoughts on the Comet*, ch. 21, art. 11) that, these natures being without cognition, in establishing them one weakened the argument which proves, through the marvellous formation of things, that the universe must have an intelligent Cause. M. le Clerc replied (4th art. of the 5th vol. of his *Select Library*) that these natures required to be directed by divine wisdom. M. Bayle insisted (7th article of the *Histoire des Ouvrages des Savants*, August 1704) that direction alone was not sufficient for a cause devoid of cognition, unless one took the cause to be a mere instrument of God, in which case direction would be needless. My system was touched upon in passing; and that gave me an opportunity to send a short essay to the illustrious author of the *Histoire des Ouvrages des Savants*, which he inserted in the month of May 1705, art. 9. In this I endeavoured to make clear that in reality mechanism is sufficient to produce the organic bodies of animals, without any need of other plastic natures, provided there be added thereto the *preformation* already completely organic in the seeds of the bodies that come into existence, contained in those of the bodies whence they spring, right back to the primary seeds. This could only proceed from the Author of things, infinitely powerful and infinitely wise, who, creating all in the beginning in due order, had *pre-established* there all order and artifice that was to be. There is no chaos in the inward nature of things, and there is organism everywhere in a matter whose disposition proceeds from God. More and more of it would come to light if we pressed closer our examination of the anatomy of bodies; and we should continue to observe it even if we could go on to infinity, like Nature, and make subdivision as continuous in our knowledge as Nature has made it in fact.

In order to explain this marvel of the formation of animals, I made use of a Pre-established Harmony, that is to say, of the same means I had used to

explain another marvel, namely the correspondence of soul with body, wherein I proved the uniformity and the fecundity of the principles I had employed. It seems that this reminded M. Bayle of my system of accounting for this correspondence, which he had examined formerly. He declared (in chapter 180 of his *Reply to the Questions of a Provincial*, vol. III,) that he did not believe God could give to matter or to any other cause the faculty of becoming organic without communicating to it the idea and the knowledge of organic nature. Also he was not yet disposed to believe that God, with all his power over Nature and with all the foreknowledge which he has of the contingencies that may arrive, could have so disposed things that by the laws of mechanics alone a vessel (for instance) should go to its port of destination without being steered during its passage by some intelligent guide. I was surprised to see that limits were placed on the power of God, without the adduction of any proof and without indication that there was any contradiction to be feared on the side of the object or any imperfection on God's side. Whereas I had shown before in my Rejoinder that even men often produce through automata something like the movements that come from reason, and that even a finite mind (but one far above ours) could accomplish what M. Bayle thinks impossible to the Divinity. Moreover, as God orders all things at once beforehand, the accuracy of the path of this vessel would be no more strange than that of a fuse passing along a cord in fireworks, since the whole disposition of things preserves a perfect harmony between them by means of their influence one upon the other.

This declaration of M. Bayle pledged me to an answer. I therefore purposed to point out to him, that unless it be said that God forms organic bodies himself by a perpetual miracle, or that he has entrusted this care to intelligences whose power and knowledge are almost divine, we must hold the opinion that God *preformed* things in such sort that new organisms are only a mechanical consequence of a preceding organic constitution. Even so

do butterflies come out of silkworms, an instance where M. Swammerdam has shown that there is nothing but development. And I would have added that nothing is better qualified than the preformation of plants and of animals to confirm my System of Pre-established Harmony between the soul and the body. For in this the body is prompted by its original constitution to carry out with the help of external things all that it does in accordance with the will of the soul. So the seeds by their original constitution carry out naturally the intentions of God, by an artifice greater still than that which causes our body to perform everything in conformity with our will. And since M. Bayle himself deems with reason that there is more artifice in the organism of animals than in the most beautiful poem in the world or in the most admirable invention whereof the human mind is capable, it follows that my system of the connexion between the body and the soul is as intelligible as the general opinion on the formation of animals. For this opinion (which appears to me true) states in effect that the wisdom of God has so made Nature that it is competent in virtue of its laws to form animals; I explain this opinion and throw more light upon the possibility of it through the system of preformation. Whereafter there will be no cause for surprise that God has so made the body that by virtue of its own laws it can carry out the intentions of the reasoning soul: for all that the reasoning soul can demand of the body is less difficult than the organization which God has demanded of the seeds. M. Bayle says (*Reply to the Questions of a Provincial*, ch. 182,) that it is only very recently there have been people who have understood that the formation of living bodies cannot be a natural process. This he could say also (in accordance with his principles) of the communication between the soul and the body, since God effects this whole communication in the system of occasional causes to which this author subscribes. But I admit the supernatural here only in the beginning of things, in respect of the first formation of animals or in respect of the

original constitution of pre-established harmony between the soul and the body. Once that has come to pass, I hold that the formation of animals and the relation between the soul and the body are something as natural now as the other most ordinary operations of Nature. A close parallel is afforded by people's ordinary thinking about the instinct and the marvellous behaviour of brutes. One recognizes reason there not in the brutes but in him who created them. I am, then, of the general opinion in this respect; but I hope that my explanation will have added clearness and lucidity, and even a more ample range, to that opinion.

Now when preparing to justify my system in face of the new difficulties of M. Bayle, I purposed at the same time to communicate to him the ideas which I had had for some time already, on the difficulties put forward by him in opposition to those who endeavour to reconcile reason with faith in regard to the existence of evil. Indeed, there are perhaps few persons who have toiled more than I in this matter. Hardly had I gained some tolerable understanding of Latin writings when I had an opportunity of turning over books in a library. I flitted from book to book, and since subjects for meditation pleased me as much as histories and fables, I was charmed by the work of Laurentius Valla against Boethius and by that of Luther against Erasmus, although I was well aware that they had need of some mitigation. I did not omit books of controversy, and amongst other writings of this nature the records of the Montbéliard Conversation, which had revived the dispute, appeared to me instructive. Nor did I neglect the teachings of our theologians: and the study of their opponents, far from disturbing me, served to strengthen me in the moderate opinions of the Churches of the Augsburg Confession. I had opportunity on my journeys to confer with some excellent men of different parties, for instance with Bishop Peter von Wallenburg, Suffragan of Mainz, with Herr Johann Ludwig Fabricius, premier theologian of Heidelberg, and finally with the celebrated M.

Arnauld. To him I even tendered a Latin Dialogue of my own composition upon this subject, about the year 1673, wherein already I laid it down that God, having chosen the most perfect of all possible worlds, had been prompted by his wisdom to permit the evil which was bound up with it, but which still did not prevent this world from being, all things considered, the best that could be chosen. I have also since read many and various good authors on these subjects, and I have endeavoured to make progress in the knowledge that seems to me proper for banishing all that could have obscured the idea of supreme perfection which must be acknowledged in God. I have not neglected to examine the most rigorous authors, who have extended furthest the doctrine of the necessity of things, as for instance Hobbes and Spinoza, of whom the former advocated this absolute necessity not only in his *Physical Elements* and elsewhere, but also in a special book against Bishop Bramhall. And Spinoza insists more or less (like an ancient Peripatetic philosopher named Strato) that all has come from the first cause or from primitive Nature by a blind and geometrical necessity, with complete absence of capacity for choice, for goodness and for understanding in this first source of things.

I have found the means, so it seems to me, of demonstrating the contrary in a way that gives one a clear insight into the inward essence of the matter. For having made new discoveries on the nature of active force and the laws of motion, I have shown that they have no geometrical necessity, as Spinoza appears to have believed they had. Neither, as I have made plain, are they purely arbitrary, even though this be the opinion of M. Bayle and of some modern philosophers: but they are dependent upon the fitness of things as I have already pointed out above, or upon that which I call the ‘principle of the best’. Moreover one recognizes therein, as in every other thing, the marks of the first substance, whose productions bear the stamp of a supreme

wisdom and make the most perfect of harmonies. I have shown also that this harmony connects both the future with the past and the present with the absent. The first kind of connexion unites times, and the other places. This second connexion is displayed in the union of the soul with the body, and in general in the communication of true substances with one another and with material phenomena. But the first takes place in the preformation of organic bodies, or rather of all bodies, since there is organism everywhere, although all masses do not compose organic bodies. So a pond may very well be full of fish or of other organic bodies, although it is not itself an animal or organic body, but only a mass that contains them. Thus I had endeavoured to build upon such foundations, established in a conclusive manner, a complete body of the main articles of knowledge that reason pure and simple can impart to us, a body whereof all the parts were properly connected and capable of meeting the most important difficulties of the ancients and the moderns. I had also in consequence formed for myself a certain system concerning the freedom of man and the cooperation of God. This system appeared to me to be such as would in no wise offend reason and faith; and I desired to submit it to the scrutiny of M. Bayle, as well as of those who are in controversy with him. Now he has departed from us, and such a loss is no small one, a writer whose learning and acumen few have equalled. But since the subject is under consideration and men of talent are still occupied with it, while the public also follows it attentively, I take this to be a fitting moment for the publication of certain of my ideas.

It will perhaps be well to add the observation, before finishing this preface, that in denying the physical influence of the soul upon the body or of the body upon the soul, that is, an influence causing the one to disturb the laws of the other, I by no means deny the union of the one with the other which forms of them a suppositum; but this union is something metaphysical, which changes nothing in the phenomena. This is what I have

already said in reply to the objection raised against me, in the *Mémoires de Trévoux*, by the Reverend Father de Tournemine, whose wit and learning are of no ordinary mould. And for this reason one may say also in a metaphysical sense that the soul acts upon the body and the body upon the soul. Moreover, it is true that the soul is the Entelechy or the active principle, whereas the corporeal alone or the mere material contains only the passive. Consequently the principle of action is in the soul, as I have explained more than once in the *Leipzig Journal*. More especially does this appear in my answer to the late Herr Sturm, philosopher and mathematician of Altorf, where I have even demonstrated that, if bodies contained only the passive, their different conditions would be indistinguishable. Also I take this opportunity to say that, having heard of some objections made by the gifted author of the book on *Self-knowledge*, in that same book, to my System of Pre-established Harmony, I sent a reply to Paris, showing that he has attributed to me opinions I am far from holding. On another matter recently I met with like treatment at the hands of an anonymous Doctor of the Sorbonne. And these misconceptions would have become plain to the reader at the outset if my own words, which were being taken in evidence, had been quoted.

This tendency of men to make mistakes in presenting the opinions of others leads me to observe also, that when I said somewhere that man helps himself in conversion through the succour of grace, I mean only that he derives advantage from it through the cessation of the resistance overcome, but without any cooperation on his part: just as there is no co-operation in ice when it is broken. For conversion is purely the work of God’s grace, wherein man co-operates only by resisting it; but human resistance is more or less great according to the persons and the occasions. Circumstances also contribute more or less to our attention and to the motions that arise in the soul; and the co-operation of all these things, together with the strength of

the impression and the condition of the will, determines the operation of grace, although not rendering it necessary. I have expounded sufficiently elsewhere that in relation to matters of salvation unregenerate man is to be considered as dead; and I greatly approve the manner wherein the theologians of the Augsburg Confession declare themselves on this subject. Yet this corruption of unregenerate man is, it must be added, no hindrance to his possession of true moral virtues and his performance of good actions in his civic life, actions which spring from a good principle, without any evil intention and without mixture of actual sin. Wherein I hope I shall be forgiven, if I have dared to diverge from the opinion of St. Augustine: he was doubtless a great man, of admirable intelligence, but inclined sometimes, as it seems, to exaggerate things, above all in the heat of his controversies. I greatly esteem some persons who profess to be disciples of St. Augustine, amongst others the Reverend Father Quênel, a worthy successor of the great Arnauld in the pursuit of controversies that have embroiled them with the most famous of Societies. But I have found that usually in disputes between people of conspicuous merit (of whom there are doubtless some here in both parties) there is right on both sides, although in different points, and it is rather in the matter of defence than attack, although the natural malevolence of the human heart generally renders attack more agreeable to the reader than defence. I hope that the Reverend Father Ptolemei, who does his Society credit and is occupied in filling the gaps left by the famous Bellarmine, will give us, concerning all of that, some explanations worthy of his acumen and his knowledge, and I even dare to add, his moderation. And one must believe that among the theologians of the Augsburg Confession there will arise some new Chemnitz or some new Callixtus; even as one is justified in thinking that men like Usserius or Daillé will again appear among the Reformed, and that all will work more and more to remove the misconceptions wherewith this

matter is charged. For the rest I shall be well pleased that those who shall wish to examine it closely read the objections with the answers I have given thereto, formulated in the small treatise I have placed at the end of the work by way of summary. I have endeavoured to forestall some new objections. I have explained, for instance, why I have taken the antecedent and consequent will as preliminary and final, after the example of Thomas, of Scotus and others; how it is possible that there be incomparably more good in the glory of all the saved than there is evil in the misery of all the damned, despite that there are more of the latter; how, in saying that evil has been permitted as a *conditio sine qua non* of good, I mean not according to the principle of necessity, but according to the principle of the fitness of things. Furthermore I show that the predetermination I admit is such as always to predispose, but never to necessitate, and that God will not refuse the requisite new light to those who have made a good use of that which they had. Other elucidations besides I have endeavoured to give on some difficulties which have been put before me of late. I have, moreover, followed the advice of some friends who thought it fitting that I should add two appendices: the one treats of the controversy carried on between Mr. Hobbes and Bishop Bramhall touching Freedom and Necessity, the other of the learned work on *The Origin of Evil*, published a short time ago in England.

Finally I have endeavoured in all things to consider edification: and if I have conceded something to curiosity, it is because I thought it necessary to relieve a subject whose seriousness may cause discouragement. It is with that in view that I have introduced into this dissertation the pleasing chimera of a certain astronomical theology, having no ground for apprehension that it will ensnare anyone and deeming that to tell it and refute it is the same thing. Fiction for fiction, instead of imagining that the planets were suns, one might conceive that they were masses melted in the

sun and thrown out, and that would destroy the foundation of this hypothetical theology. The ancient error of the two principles, which the Orientals distinguished by the names Oromasdes and Arimanius, caused me to explain a conjecture on the primitive history of peoples. It appears indeed probable that these were the names of two great contemporary princes, the one monarch of a part of upper Asia, where there have since been others of this name, the other king of the Scythian Celts who made incursions into the states of the former, and who was also named amongst the divinities of Germania. It seems, indeed, that Zoroaster used the names of these princes as symbols of the invisible powers which their exploits made them resemble in the ideas of Asiatics. Yet elsewhere, according to the accounts of Arab authors, who in this might well be better informed than the Greeks, it appears from detailed records of ancient oriental history, that this Zerdust or Zoroaster, whom they make contemporary with the great Darius, did not look upon these two principles as completely primitive and independent, but as dependent upon one supreme and single principle. They relate that he believed, in conformity with the cosmogony of Moses, that God, who is without an equal, created all and separated the light from the darkness; that the light conformed with his original design, but that the darkness came as a consequence, even as the shadow follows the body, and that this is nothing but privation. Such a thesis would clear this ancient author of the errors the Greeks imputed to him. His great learning caused the Orientals to compare him with the Mercury or Hermes of the Egyptians and Greeks; just as the northern peoples compared their Wodan or Odin to this same Mercury. That is why Mercredi (Wednesday), or the day of Mercury, was called Wodansdag by the northern peoples, but day of Zerdust by the Asiatics, since it is named Zarschamba or Dsearschambe by the Turks and the Persians, Zerda by the Hungarians from the north-east, and Sreda by the Slavs from the heart of Great Russia, as far as the Wends of the Luneburg

region, the Slavs having learnt the name also from the Orientals. These observations will perhaps not be displeasing to the curious. And I flatter myself that the small dialogue ending the Essays written to oppose M. Bayle will give some satisfaction to those who are well pleased to see difficult but important truths set forth in an easy and familiar way. I have written in a foreign language at the risk of making many errors in it, because that language has been recently used by others in treating of my subject, and because it is more generally read by those whom one would wish to benefit by this small work. It is to be hoped that the language errors will be pardoned: they are to be attributed not only to the printer and the copyist, but also to the haste of the author, who has been much distracted from his task. If, moreover, any error has crept into the ideas expressed, the author will be the first to correct it, once he has been better informed: he has given elsewhere such indications of his love of truth that he hopes this declaration will not be regarded as merely an empty phrase.

PRELIMINARY DISSERTATION ON THE CONFORMITY OF FAITH WITH REASON

1. I BEGIN with the preliminary question of the *conformity of faith with reason*, and the use of philosophy in theology, because it has much influence on the main subject of my treatise, and because M. Bayle introduces it everywhere. I assume that two truths cannot contradict each other; that the object of faith is the truth God has revealed in an extraordinary way; and that reason is the linking together of truths, but especially (when it is compared with faith) of those whereto the human mind can attain naturally without being aided by the light of faith. This definition of reason (that is to say of strict and true reason) has surprised some persons accustomed to inveigh against reason taken in a vague sense. They gave me the answer that they had never heard of any such explanation of it: the truth is that they have never conferred with people who expressed themselves clearly on these subjects. They have confessed to me, nevertheless, that one could not find fault with reason, understood in the sense which I gave to it. It is in the same sense that sometimes reason is contrasted with experience. Reason, since it consists in the linking together of truths, is entitled to connect also those wherewith experience has furnished it, in order thence to draw mixed conclusions; but reason pure and simple, as distinct from experience, only has to do with truths independent of the senses. And one may compare faith with experience, since faith (in respect of the motives that give it justification) depends upon the experience of those who have seen the miracles whereon revelation is founded, and upon the trustworthy tradition which has handed them down to us, whether through the Scriptures or by the account of those who have preserved them.

It is rather as we rely upon the experience of those who have seen China and on the credibility of their account when we give credence to the wonders that are told us of that distant country. Yet I would also take into account the inward motion of the Holy Spirit, who takes possession of souls and persuades them and prompts them to good, that is, to faith and to charity, without always having need of motives.

2. Now the truths of reason are of two kinds: the one kind is of those called the 'Eternal Verities', which are altogether necessary, so that the opposite implies contradiction. Such are the truths whose necessity is logical, metaphysical or geometrical, which one cannot deny without being led into absurdities. There are others which may be called *positive*, because they are the laws which it has pleased God to give to Nature, or because they depend upon those. We learn them either by experience, that is, *a posteriori*, or by reason and *a priori*, that is, by considerations of the fitness of things which have caused their choice. This fitness of things has also its rules and reasons, but it is the free choice of God, and not a geometrical necessity, which causes preference for what is fitting and brings it into existence. Thus one may say that physical necessity is founded on moral necessity, that is, on the wise one's choice which is worthy of his wisdom; and that both of these ought to be distinguished from geometrical necessity. It is this physical necessity that makes order in Nature and lies in the rules of motion and in some other general laws which it pleased God to lay down for things when he gave them being. It is therefore true that God gave such laws not without reason, for he chooses nothing from caprice and as though by chance or in pure indifference; but the general reasons of good and of order, which have prompted him to the choice, may be overcome in some cases by stronger reasons of a superior order.

3. Thus it is made clear that God can exempt creatures from the laws he has prescribed for them, and produce in them that which their nature does

not bear by performing a miracle. When they have risen to perfections and faculties nobler than those whereto they can by their nature attain, the Schoolmen call this faculty an 'Obediential Power', that is to say, a power which the thing acquires by obeying the command of him who can give that which the thing has not. The Schoolmen, however, usually give instances of this power which to me appear impossible: they maintain, for example, that God can give the creature the faculty to create. It may be that there are miracles which God performs through the ministry of angels, where the laws of Nature are not violated, any more than when men assist Nature by art, the skill of angels differing from ours only by degree of perfection. Nevertheless it still remains true that the laws of Nature are subject to be dispensed from by the Law-giver; whereas the eternal verities, as for instance those of geometry, admit no dispensation, and faith cannot contradict them. Thus it is that there cannot be any invincible objection to truth. For if it is a question of proof which is founded upon principles or incontestable facts and formed by a linking together of eternal verities, the conclusion is certain and essential, and that which is contrary to it must be false; otherwise two contradictories might be true at the same time. If the objection is not conclusive, it can only form a probable argument, which has no force against faith, since it is agreed that the Mysteries of religion are contrary to appearances. Now M. Bayle declares, in his posthumous Reply to M. le Clerc, that he does not claim that there are demonstrations contrary to the truths of faith: and as a result all these insuperable difficulties, these so-called wars between reason and faith, vanish away.

Hi motus animorum atque haec discrimina tanta,
Pulveris exigui jactu compressa quiescunt.

4. Protestant theologians as well as those of the Roman confession admit the maxims which I have just laid down, when they handle the matter with attention; and all that is said against reason has no force save against a kind

of counterfeit reason, corrupted and deluded by false appearances. It is the same with our notions of the justice and the goodness of God, which are spoken of sometimes as if we had neither any idea nor any definition of their nature. But in that case we should have no ground for ascribing these attributes to him, or lauding him for them. His goodness and his justice as well as his wisdom differ from ours only because they are infinitely more perfect. Thus the simple notions, the necessary truths and the conclusive results of philosophy cannot be contrary to revelation. And when some philosophical maxims are rejected in theology, the reason is that they are considered to have only a physical or moral necessity, which speaks only of that which takes place usually, and is consequently founded on appearances, but which may be withheld if God so pleases.

5. It seems, according to what I have just said, that there is often some confusion in the expressions of those who set at variance philosophy and theology, or faith and reason: they confuse the terms ‘explain’, ‘comprehend’, ‘prove’, ‘uphold’. And I find that M. Bayle, shrewd as he is, is not always free from this confusion. Mysteries may be *explained* sufficiently to justify belief in them; but one cannot *comprehend* them, nor give understanding of how they come to pass. Thus even in natural philosophy we explain up to a certain point sundry perceptible qualities, but in an imperfect manner, for we do not comprehend them. Nor is it possible for us, either, to prove Mysteries by reason; for all that which can be proved *a priori*, or by pure reason, can be comprehended. All that remains for us then, after having believed in the Mysteries by reason of the proofs of the truth of religion (which are called ‘motives of credibility’) is to be able to *uphold* them against objections. Without that our belief in them would have no firm foundation; for all that which can be refuted in a sound and conclusive manner cannot but be false. And such proofs of the truth of religion as can give only a *moral certainty* would be balanced and even

outweighed by such objections as would give an *absolute certainty*, provided they were convincing and altogether conclusive. This little might suffice me to remove the difficulties concerning the use of reason and philosophy in relation to religion if one had not to deal all too often with prejudiced persons. But as the subject is important and it has fallen into a state of confusion, it will be well to take it in greater detail.

6. The question of the *conformity of faith with reason* has always been a great problem. In the primitive Church the ablest Christian authors adapted themselves to the ideas of the Platonists, which were the most acceptable to them, and were at that time most generally in favour. Little by little Aristotle took the place of Plato, when the taste for systems began to prevail, and when theology itself became more systematic, owing to the decisions of the General Councils, which provided precise and positive formularies. St. Augustine, Boethius and Cassiodorus in the West, and St. John of Damascus in the East contributed most towards reducing theology to scientific form, not to mention Bede, Alcuin, St. Anselm and some other theologians versed in philosophy. Finally came the Schoolmen. The leisure of the cloisters giving full scope for speculation, which was assisted by Aristotle's philosophy translated from the Arabic, there was formed at last a compound of theology and philosophy wherein most of the questions arose from the trouble that was taken to reconcile faith with reason. But this had not met with the full success hoped for, because theology had been much corrupted by the unhappiness of the times, by ignorance and obstinacy. Moreover, philosophy, in addition to its own faults, which were very great, found itself burdened with those of theology, which in its turn was suffering from association with a philosophy that was very obscure and very imperfect. One must confess, notwithstanding, with the incomparable Grotius, that there is sometimes gold hidden under the rubbish of the monks' barbarous Latin. I have therefore oft-times wished that a man of

talent, whose office had necessitated his learning the language of the Schoolmen, had chosen to extract thence whatever is of worth, and that another Petau or Thomasius had done in respect of the Schoolmen what these two learned men have done in respect of the Fathers. It would be a very curious work, and very important for ecclesiastical history, and it would continue the History of Dogmas up to the time of the Revival of Letters (owing to which the aspect of things has changed) and even beyond that point. For sundry dogmas, such as those of physical predetermination, of mediate knowledge, philosophical sin, objective precisions, and many other dogmas in speculative theology and even in the practical theology of cases of conscience, came into currency even after the Council of Trent.

7. A little before these changes, and before the great schism in the West that still endures, there was in Italy a sect of philosophers which disputed this conformity of faith with reason which I maintain. They were dubbed ‘Averroists’ because they were adherents of a famous Arab author, who was called the Commentator by pre-eminence, and who appeared to be the one of all his race that penetrated furthest into Aristotle’s meaning. This Commentator, extending what Greek expositors had already taught, maintained that according to Aristotle, and even according to reason (and at that time the two were considered almost identical) there was no case for the immortality of the soul. Here is his reasoning. The human kind is eternal, according to Aristotle, therefore if individual souls die not, one must resort to the metempsychosis rejected by that philosopher. Or, if there are always new souls, one must admit the infinity of these souls existing from all eternity; but actual infinity is impossible, according to the doctrine of the same Aristotle. Therefore it is a necessary conclusion that the souls, that is, the forms of organic bodies, must perish with the bodies, or at least this must happen to the passive understanding that belongs to each one individually. Thus there will only remain the active understanding common

to all men, which according to Aristotle comes from outside, and which must work wheresoever the organs are suitably disposed; even as the wind produces a kind of music when it is blown into properly adjusted organ pipes.

8. Nothing could have been weaker than this would-be proof. It is not true that Aristotle refuted metempsychosis, or that he proved the eternity of the human kind; and after all, it is quite untrue that an actual infinity is impossible. Yet this proof passed as irresistible amongst Aristotelians, and induced in them the belief that there was a certain sublunary intelligence and that our active intellect was produced by participation in it. But others who adhered less to Aristotle went so far as to advocate a universal soul forming the ocean of all individual souls, and believed this universal soul alone capable of subsisting, whilst individual souls are born and die. According to this opinion the souls of animals are born by being separated like drops from their ocean, when they find a body which they can animate; and they die by being reunited to the ocean of souls when the body is destroyed, as streams are lost in the sea. Many even went so far as to believe that God is that universal soul, although others thought that this soul was subordinate and created. This bad doctrine is very ancient and apt to dazzle the common herd. It is expressed in these beautiful lines of Vergil (*Aen.* VI, v. 724):

Principio coelum ac terram camposque liquentes,
Lucentemque globum Lunae Titaniaque astra,
Spiritus intus alit, totamque infusa per artus
Mens agitat molem, et magno se corpore miscet.
Inde hominum pecudumque genus vitaeque volantum.

And again elsewhere (*Georg.* IV, v. 221):

Deum namque ire per omnes

Terrasque tractusque maris caelumque profundum:
Hinc pecudes, armenta, viros, genus omne ferarum,
Quemque sibi tenues nascentem arcessere vitas.
Scilicet huc reddi deinde ac resoluta referri.

9. Plato's Soul of the World has been taken in this sense by some, but there is more indication that the Stoics succumbed to that universal soul which swallows all the rest. Those who are of this opinion might be called 'Monopsychites', since according to them there is in reality only one soul that subsists. M. Bernier observes that this is an opinion almost universally accepted amongst scholars in Persia and in the States of the Grand Mogul; it appears even that it has gained a footing with the Cabalists and with the mystics. A certain German of Swabian birth, converted to Judaism some years ago, who taught under the name Moses Germanus, having adopted the dogmas of Spinoza, believed that Spinoza revived the ancient Cabala of the Hebrews. And a learned man who confuted this proselyte Jew appears to be of the same opinion. It is known that Spinoza recognizes only substance in the world, whereof individual souls are but transient modifications. Valentin Weigel, Pastor of Zschopau in Saxony, a man of wit, even of excessive wit, although people would have it that he was a visionary, was perhaps to some extent of that opinion; as was also a man known as Johann Angelus Silesius, author of certain quite pleasing little devotional verses in German, in the form of epigrams, which have just been reprinted. In general, the mystics' doctrine of deification was liable to such a sinister interpretation. Gerson already has written opposing Ruysbroek, a mystical writer, whose intention was evidently good and whose expressions are excusable. But it would be better to write in a manner that has no need of excuses: although I confess that oft-times expressions which are extravagant, and as it were poetical, have greater force to move and to persuade than correct forms of statement.

10. The annihilation of all that belongs to us in our own right, carried to great lengths by the Quietists, might equally well be veiled irreligion in certain minds, as is related, for example, concerning the Quietism of Foë, originator of a great Chinese sect. After having preached his religion for forty years, when he felt death was approaching, he declared to his disciples that he had hidden the truth from them under the veil of metaphors, and that all reduced itself to Nothingness, which he said was the first source of all things. That was still worse, so it would seem, than the opinion of the Averroists. Both of these doctrines are indefensible and even extravagant; nevertheless some moderns have made no difficulty about adopting this one and universal Soul that engulfs the rest. It has met with only too much applause amongst the so-called freethinkers, and M. de Preissac, a soldier and man of wit, who dabbled in philosophy, at one time aired it publicly in his discourses. The System of Pre-established Harmony is the one best qualified to cure this evil. For it shows that there are of necessity substances which are simple and without extension, scattered throughout all Nature; that these substances must subsist independently of every other except God; and that they are never wholly separated from organic body. Those who believe that souls capable of feeling but incapable of reason are mortal, or who maintain that none but reasoning souls can have feeling, offer a handle to the Monopsychites. For it will ever be difficult to persuade men that beasts feel nothing; and once the admission has been made that that which is capable of feeling can die, it is difficult to found upon reason a proof of the immortality of our souls.

11. I have made this short digression because it appeared to me seasonable at a time when there is only too much tendency to overthrow natural religion to its very foundations. I return then to the Averroists, who were persuaded that their dogma was proved conclusively in accordance with reason. As a result they declared that man’s soul is, according to

philosophy, mortal, while they protested their acquiescence in Christian theology, which declares the soul's immortality. But this distinction was held suspect, and this divorce between faith and reason was vehemently rejected by the prelates and the doctors of that time, and condemned in the last Lateran Council under Leo X. On that occasion also, scholars were urged to work for the removal of the difficulties that appeared to set theology and philosophy at variance. The doctrine of their incompatibility continued to hold its ground *incognito*. Pomponazzi was suspected of it, although he declared himself otherwise; and that very sect of the Averroists survived as a school. It is thought that Caesar Cremoninus, a philosopher famous in his time, was one of its mainstays. Andreas Cisalpinus, a physician (and an author of merit who came nearest after Michael Servetus to the discovery of the circulation of the blood), was accused by Nicolas Taurel (in a book entitled *Alpes Caesae*) of belonging to these anti-religious Peripatetics. Traces of this doctrine are found also in the *Circulus Pisanus Claudii Berigardi*, an author of French nationality who migrated to Italy and taught philosophy at Pisa: but especially the writings and the letters of Gabriel Naudé, as well as the *Naudaeana*, show that Averroism still lived on when this learned physician was in Italy. Corpuscular philosophy, introduced shortly after, appears to have extinguished this excessively Peripatetic sect, or perhaps to have been intermixed with its teaching. It may be indeed that there have been Atomists who would be inclined to teach dogmas like those of the Averroists, if circumstances so permitted: but this abuse cannot harm such good as there is in Corpuscular philosophy, which can very well be combined with all that is sound in Plato and in Aristotle, and bring them both into harmony with true theology.

12. The Reformers, and especially Luther, as I have already observed, spoke sometimes as if they rejected philosophy, and deemed it inimical to faith. But, properly speaking, Luther understood by philosophy only that

which is in conformity with the ordinary course of Nature, or perhaps even philosophy as it was taught in the schools. Thus for example he says that it is impossible in philosophy, that is, in the order of Nature, that the word be made flesh; and he goes so far as to maintain that what is true in natural philosophy might be false in ethics. Aristotle was the object of his anger; and so far back as the year 1516 he contemplated the purging of philosophy, when he perhaps had as yet no thoughts of reforming the Church. But at last he curbed his vehemence and in the *Apology for the Augsburg Confession* allowed a favourable mention of Aristotle and his *Ethics*. Melanchthon, a man of sound and moderate ideas, made little systems from the several parts of philosophy, adapted to the truths of revelation and useful in civic life, which deserve to be read even now. After him, Pierre de la Ramée entered the lists. His philosophy was much in favour: the sect of the Ramists was powerful in Germany, gaining many adherents among the Protestants, and even concerning itself with theology, until the revival of Corpuscular philosophy, which caused that of Ramée to fall into oblivion and weakened the authority of the Peripatetics.

13. Meanwhile sundry Protestant theologians, deviating as far as they could from Scholastic philosophy, which prevailed in the opposite party, went so far as to despise philosophy itself, which to them was suspect. The controversy blazed up finally owing to the rancour of Daniel Hoffmann. He was an able theologian, who had previously gained a reputation at the Conference of Quedlinburg, when Tilemann Heshusius and he had supported Duke Julius of Brunswick in his refusal to accept the Formula of Concord. For some reason or other Dr. Hoffmann flew into a passion with philosophy, instead of being content to find fault with the wrong uses made thereof by philosophers. He was, however, aiming at the famous Caselius, a man esteemed by the princes and scholars of his time; and Henry Julius, Duke of Brunswick (son of Julius, founder of the University), having taken

the trouble himself to investigate the matter, condemned the theologian. There have been some small disputes of the kind since, but it has always been found that they were misunderstandings. Paul Slevogt, a famous Professor at Jena in Thuringia, whose still extant treatises prove how well versed he was in Scholastic philosophy, as also in Hebrew literature, had published in his youth under the title of *Pervigilium* a little book ‘de dissidio Theologi et Philosophi in utriusque principiis fundato’, bearing on the question whether God is accidentally the cause of sin. But it was easy to see that his aim was to demonstrate that theologians sometimes misuse philosophical terms.

14. To come now to the events of my own time, I remember that when in 1666 Louis Meyer, a physician of Amsterdam, published anonymously the book entitled *Philosophia Scripturae Interpres* (by many persons wrongly attributed to Spinoza, his friend) the theologians of Holland bestirred themselves, and their written attacks upon this book gave rise to great disputes among them. Divers of them held the opinion that the Cartesians, in confuting the anonymous philosopher, had conceded too much to philosophy. Jean de Labadie (before he had seceded from the Reformed Church, his pretext being some abuses which he said had crept into public observance and which he considered intolerable) attacked the book by Herr von Wollzogen, and called it pernicious. On the other hand Herr Vogelsang, Herr van der Weye and some other anti-Cocceïans also assailed the same book with much acrimony. But the accused won his case in a Synod. Afterwards in Holland people spoke of ‘rational’ and ‘non-rational’ theologians, a party distinction often mentioned by M. Bayle, who finally declared himself against the former. But there is no indication that any precise rules have yet been defined which the rival parties accept or reject with regard to the use of reason in the interpretation of Holy Scripture.

15. A like dispute has threatened of late to disturb the peace in the Churches of the Augsburg Confession. Some Masters of Arts in the University of Leipzig gave private lessons at their homes, to students who sought them out in order to learn what is called ‘Sacra Philologia’, according to the practice of this university and of some others where this kind of study is not restricted to the Faculty of Theology. These masters pressed the study of the Holy Scriptures and the practice of piety further than their fellows had been wont to do. It is alleged that they had carried certain things to excess, and aroused suspicions of certain doctrinal innovations. This caused them to be dubbed ‘Pietists’, as though they were a new sect; and this name is one which has since caused a great stir in Germany. It has been applied somehow or other to those whom one suspected, or pretended to suspect, of fanaticism, or even of hypocrisy, concealed under some semblance of reform. Now some of the students attending these masters had become conspicuous for behaviour which gave general offence, and amongst other things for their scorn of philosophy, even, so it was said, burning their notebooks. In consequence the belief arose that their masters rejected philosophy: but they justified themselves very well; nor could they be convicted either of this error or of the heresies that were being imputed to them.

16. The question of the use of philosophy in theology was debated much amongst Christians, and difficulty was experienced over settling the limits of its use when it came to detailed consideration. The Mysteries of the Trinity, of the Incarnation and of the Holy Communion gave most occasion for dispute. The new Photinians, disputing the first two Mysteries, made use of certain philosophic maxims which Andreas Kessler, a theologian of the Augsburg Confession, summarized in the various treatises that he published on the parts of the Socinian philosophy. But as to their metaphysics, one might instruct oneself better therein by reading the work of Christopher

Stegmann the Socinian. It is not yet in print; but I saw it in my youth and it has been recently again in my hands.

17. Calovius and Scherzer, authors well versed in Scholastic philosophy, and sundry other able theologians answered the Socinians at great length, and often with success: for they would not content themselves with the general and somewhat cavalier answers that were commonly used against that sect. The drift of such answers was: that their maxims were good in philosophy and not in theology; that it was the fault of heterogeneousness called μεταβασις εις αλλο γενος to apply those maxims to a matter transcending reason; and that philosophy should be treated as a servant and not a mistress in relation to theology, according to the title of the book by a Scot named Robert Baronius, *Philosophia Theologiae ancillans*. In fine, philosophy was a Hagar beside Sara and must be driven from the house with her Ishmael when she was refractory. There is something good in these answers: but one might abuse them, and set natural truths and truths of revelation at variance. Scholars therefore applied themselves to distinguishing between what is necessary and indispensable in natural or philosophic truths and that which is not so.

18. The two Protestant parties are tolerably in agreement when it is a question of making war on the Socinians; and as the philosophy of these sectaries is not of the most exact, in most cases the attack succeeded in reducing it. But the Protestants themselves had dissensions on the matter of the Eucharistic Sacrament. A section of those who are called Reformed (namely those who on that point follow rather Zwingli than Calvin) seemed to reduce the participation in the body of Jesus Christ in the Holy Communion to a mere figurative representation, employing the maxim of the philosophers which states that a body can only be in one place at a time. Contrariwise the Evangelicals (who name themselves thus in a particular sense to distinguish themselves from the Reformed), being more attached to

the literal sense of Scripture, opined with Luther that this participation was real, and that here there lay a supernatural Mystery. They reject, in truth, the dogma of Transubstantiation, which they believe to be without foundation in the Text; neither do they approve that of Consubstantiation or of Impanation, which one could only impute to them if one were ill-informed on their opinion. For they admit no inclusion of the body of Jesus Christ in the bread, nor do they even require any union of the one with the other: but they demand at least a concomitance, so that these two substances be received both at the same time. They believe that the ordinary sense of the words of Jesus Christ on an occasion so important as that which concerned the expression of his last wishes ought to be preserved. Thus in order to show that this sense is free from all absurdity which could make it repugnant to us, they maintain that the philosophic maxim restricting the existence of, and partaking in, bodies to one place alone is simply a consequence of the ordinary course of Nature. They make that no obstacle to the presence, in the ordinary sense of the word, of the body of our Saviour in such form as may be in keeping with the most glorified body. They do not resort to a vague diffusion of ubiquity, which would disperse the body and leave it nowhere in particular; nor do they admit the multiple-reduplication theory of some Schoolmen, as if to say one and the same body could be at the same time seated here and standing elsewhere. In fine, they so express themselves that many consider the opinion of Calvin, authorized by sundry confessions of faith from the Churches that have accepted his teaching, to be not so far removed from the Augsburg Confession as one might think: for he affirmed a partaking in the substance. The divergence rests perhaps only upon the fact that Calvin demands true faith in addition to the oral reception of the symbols, and consequently excludes the unworthy.

19. Thence we see that the dogma of real and substantial participation can be supported (without resorting to the strange opinions of some Schoolmen) by a properly understood analogy between *immediate operation* and *presence*. Many philosophers have deemed that, even in the order of Nature, a body may operate from a distance immediately on many remote bodies at the same time. So do they believe, all the more, that nothing can prevent divine Omnipotence from causing one body to be present in many bodies together, since the transition from immediate operation to presence is but slight, the one perhaps depending upon the other. It is true that modern philosophers for some time now have denied the immediate natural operation of one body upon another remote from it, and I confess that I am of their opinion. Meanwhile remote operation has just been revived in England by the admirable Mr. Newton, who maintains that it is the nature of bodies to be attracted and gravitate one towards another, in proportion to the mass of each one, and the rays of attraction it receives. Accordingly the famous Mr. Locke, in his answer to Bishop Stillingfleet, declares that having seen Mr. Newton's book he retracts what he himself said, following the opinion of the moderns, in his *Essay concerning Human Understanding*, to wit, that a body cannot operate immediately upon another except by touching it upon its surface and driving it by its motion. He acknowledges that God can put properties into matter which cause it to operate from a distance. Thus the theologians of the Augsburg Confession claim that God may ordain not only that a body operate immediately on divers bodies remote from one another, but that it even exist in their neighbourhood and be received by them in a way with which distances of place and dimensions of space have nothing to do. Although this effect transcends the forces of Nature, they do not think it possible to show that it surpasses the power of the Author of Nature. For him it is easy to annul the laws that he has given or to dispense with them as seems good to him, in the

same way as he was able to make iron float upon water and to stay the operation of fire upon the human body.

20. I found in comparing the *Rationale Theologicum* of Nicolaus Vedelius with the refutation by Johann Musaeus that these two authors, of whom one died while a Professor at Franecker after having taught at Geneva and the other finally became the foremost theologian at Jena, are more or less in agreement on the principal rules for the use of reason, but that it is in the application of these rules they disagree. For they both agree that revelation cannot be contrary to the truths whose necessity is called by philosophers 'logical' or 'metaphysical', that is to say, whose opposite implies contradiction. They both admit also that revelation will be able to combat maxims whose necessity is called 'physical' and is founded only upon the laws that the will of God has prescribed for Nature. Thus the question whether the presence of one and the same body in divers places is possible in the supernatural order only touches the application of the rule; and in order to decide this question conclusively by reason, one must needs explain exactly wherein the essence of body consists. Even the Reformed disagree thereon amongst themselves; the Cartesians confine it to extension, but their adversaries oppose that; and I think I have even observed that Gisbertus Voëtius, a famous theologian of Utrecht, doubted the alleged impossibility of plurality of locations.

21. Furthermore, although the two Protestant parties agree that one must distinguish these two necessities which I have just indicated, namely metaphysical necessity and physical necessity, and that the first excludes exceptions even in the case of Mysteries, they are not yet sufficiently agreed upon the rules of interpretation, which serve to determine in what cases it is permitted to desert the letter of Scripture when one is not certain that it is contrary to strictly universal truths. It is agreed that there are cases where one must reject a literal interpretation that is not absolutely impossible,

when it is otherwise unsuitable. For instance, all commentators agree that when our Lord said that Herod was a fox he meant it metaphorically; and one must accept that, unless one imagine with some fanatics that for the time the words of our Lord lasted Herod was actually changed into a fox. But it is not the same with the texts on which Mysteries are founded, where the theologians of the Augsburg Confession deem that one must keep to the literal sense. Since, moreover, this discussion belongs to the art of interpretation and not to that which is the proper sphere of logic, we will not here enter thereon, especially as it has nothing in common with the disputes that have arisen recently upon the conformity of faith with reason.

22. Theologians of all parties, I believe (fanatics alone excepted), agree at least that no article of faith must imply contradiction or contravene proofs as exact as those of mathematics, where the opposite of the conclusion can be reduced *ad absurdum*, that is, to contradiction. St. Athanasius with good reason made sport of the preposterous ideas of some writers of his time, who maintained that God had suffered without any suffering. *'Passus est impassibiliter. O ludicram doctrinam aedificantem simul et demolientem!'* It follows thence that certain writers have been too ready to grant that the Holy Trinity is contrary to that great principle which states that two things which are the same as a third are also the same as each other: that is to say, if A is the same as B, and if C is the same as B, then A and C must also be the same as each other. For this principle is a direct consequence of that of contradiction, and forms the basis of all logic; and if it ceases, we can no longer reason with certainty. Thus when one says that the Father is God, that the Son is God and that the Holy Spirit is God, and that nevertheless there is only one God, although these three Persons differ from one another, one must consider that this word *God* has not the same sense at the beginning as at the end of this statement. Indeed it signifies now the Divine Substance and now a Person of the Godhead. In general, one must take care

never to abandon the necessary and eternal truths for the sake of upholding Mysteries, lest the enemies of religion seize upon such an occasion for decrying both religion and Mysteries.

23. The distinction which is generally drawn between that which is *above* reason and that which is *against* reason is tolerably in accord with the distinction which has just been made between the two kinds of necessity. For what is contrary to reason is contrary to the absolutely certain and inevitable truths; and what is above reason is in opposition only to what one is wont to experience or to understand. That is why I am surprised that there are people of intelligence who dispute this distinction, and that M. Bayle should be of this number. The distinction is assuredly very well founded. A truth is above reason when our mind (or even every created mind) cannot comprehend it. Such is, as it seems to me, the Holy Trinity; such are the miracles reserved for God alone, as for instance Creation; such is the choice of the order of the universe, which depends upon universal harmony, and upon the clear knowledge of an infinity of things at once. But a truth can never be contrary to reason, and once a dogma has been disputed and refuted by reason, instead of its being incomprehensible, one may say that nothing is easier to understand, nor more obvious, than its absurdity. For I observed at the beginning that by reason here I do not mean the opinions and discourses of men, nor even the habit they have formed of judging things according to the usual course of Nature, but rather the inviolable linking together of truths.

24. I must come now to the great question which M. Bayle brought up recently, to wit, whether a truth, and especially a truth of faith, can prove to be subject to irrefutable objections. This excellent author appears to answer with a bold affirmative: he quotes theologians of repute in his party, and even in the Church of Rome, who appear to say the same as he affirms; and he cites philosophers who have believed that there are even philosophical

truths whose champions cannot answer the objections that are brought up against them. He believes that the theological doctrine of predestination is of this nature, and in philosophy that of the composition of the *Continuum*. These are, indeed, the two labyrinths which have ever exercised theologians and philosophers. Libertus Fromondus, a theologian of Louvain (a great friend of Jansenius, whose posthumous book entitled *Augustinus* he in fact published), who also wrote a book entitled explicitly *Labyrinthus de Compositione Continui*, experienced in full measure the difficulties inherent in both doctrines; and the renowned Ochino admirably presented what he calls 'the labyrinths of predestination'.

25. But these writers have not denied the possibility of finding thread in the labyrinth; they have recognized the difficulty, but they have surely not turned difficulty into sheer impossibility. As for me, I confess that I cannot agree with those who maintain that a truth can admit of irrefutable objections: for is an *objection* anything but an argument whose conclusion contradicts our thesis? And is not an irrefutable argument a *demonstration*? And how can one know the certainty of demonstrations except by examining the argument in detail, the form and the matter, in order to see if the form is good, and then if each premiss is either admitted or proved by another argument of like force, until one is able to make do with admitted premisses alone? Now if there is such an objection against our thesis we must say that the falsity of this thesis is demonstrated, and that it is impossible for us to have reasons sufficient to prove it; otherwise two contradictories would be true at once. One must always yield to proofs, whether they be proposed in positive form or advanced in the shape of objections. And it is wrong and fruitless to try to weaken opponents' proofs, under the pretext that they are only objections, since the opponent can play the same game and can reverse the denominations, exalting his arguments

by naming them ‘proofs’ and sinking ours under the blighting title of ‘objections’.

26. It is another question whether we are always obliged to examine the objections we may have to face, and to retain some doubt in respect of our own opinion, or what is called *formido oppositi*, until this examination has been made. I would venture to say no, for otherwise one would never attain to certainty and our conclusion would be always provisional. I believe that able geometricians will scarce be troubled by the objections of Joseph Scaliger against Archimedes, or by those of Mr. Hobbes against Euclid; but that is because they have fully understood and are sure of the proofs. Nevertheless it is sometimes well to show oneself ready to examine certain objections. On the one hand it may serve to rescue people from their error, while on the other we ourselves may profit by it; for specious fallacies often contain some useful solution and bring about the removal of considerable difficulties. That is why I have always liked ingenious objections made against my own opinions, and I have never examined them without profit: witness those which M. Bayle formerly made against my System of Pre-established Harmony, not to mention those which M. Arnauld, M. l’Abbé Foucher and Father Lami, O.S.B. made to me on the same subject. But to return to the principal question, I conclude from reasons I have just set forth that when an objection is put forward against some truth, it is always possible to answer it satisfactorily.

27. It may be also that M. Bayle does not mean ‘insoluble objections’ in the sense that I have just explained. I observe that he varies, at least in his expressions: for in his posthumous Reply to M. le Clerc he does not admit that one can bring demonstrations against the truths of faith. It appears therefore that he takes the objections to be insoluble only in respect of our present degree of enlightenment; and in this Reply,, he even does not despair of the possibility that one day a solution hitherto unknown may be

found by someone. Concerning that more will be said later. I hold an opinion, however, that will perchance cause surprise, namely that this solution has been discovered entire, and is not even particularly difficult. Indeed a mediocre intelligence capable of sufficient care, and using correctly the rules of common logic, is in a position to answer the most embarrassing objection made against truth, when the objection is only taken from reason, and when it is claimed to be a 'demonstration'. Whatever scorn the generality of moderns have to-day for the logic of Aristotle, one must acknowledge that it teaches infallible ways of resisting error in these conjunctures. For one has only to examine the argument according to the rules and it will always be possible to see whether it is lacking in form or whether there are premisses such as are not yet proved by a good argument.

28. It is quite another matter when there is only a question of *probabilities*, for the art of judging from probable reasons is not yet well established; so that our logic in this connexion is still very imperfect, and to this very day we have little beyond the art of judging from demonstrations. But this art is sufficient here: for when it is a question of opposing reason to an article of our faith, one is not disturbed by objections that only attain probability. Everyone agrees that appearances are against Mysteries, and that they are by no means probable when regarded only from the standpoint of reason; but it suffices that they have in them nothing of absurdity. Thus demonstrations are required if they are to be refuted.

29. And doubtless we are so to understand it when Holy Scripture warns us that the wisdom of God is foolishness before men, and when St. Paul observed that the Gospel of Jesus Christ is foolishness unto the Greeks, as well as unto the Jews a stumbling-block. For, after all, one truth cannot contradict another, and the light of reason is no less a gift of God than that of revelation. Also it is a matter of no difficulty among theologians who are expert in their profession, that the motives of credibility justify, once for all,

the authority of Holy Scripture before the tribunal of reason, so that reason in consequence gives way before it, as before a new light, and sacrifices thereto all its probabilities. It is more or less as if a new president sent by the prince must show his letters patent in the assembly where he is afterwards to preside. That is the tendency of sundry good books that we have on the truth of religion, such as those of Augustinus Steuchus, of Du Plessis-Mornay or of Grotius: for the true religion must needs have marks that the false religions have not, else would Zoroaster, Brahma, Somonacodom and Mahomet be as worthy of belief as Moses and Jesus Christ. Nevertheless divine faith itself, when it is kindled in the soul, is something more than an opinion, and depends not upon the occasions or the motives that have given it birth; it advances beyond the intellect, and takes possession of the will and of the heart, to make us act with zeal and joyfully as the law of God commands. Then we have no further need to think of reasons or to pause over the difficulties of argument which the mind may anticipate.

30. Thus what we have just said of human reason, which is extolled and decried by turns, and often without rule or measure, may show our lack of exactitude and how much we are accessary to our own errors. Nothing would be so easy to terminate as these disputes on the rights of faith and of reason if men would make use of the commonest rules of logic and reason with even a modicum of attention. Instead of that, they become involved in oblique and ambiguous phrases, which give them a fine field for declamation, to make the most of their wit and their learning. It would seem, indeed, that they have no wish to see the naked truth, peradventure because they fear that it may be more disagreeable than error: for they know not the beauty of the Author of all things, who is the source of truth.

31. This negligence is a general defect of humanity, and one not to be laid to the charge of any particular person. *Abundamus dulcibus vitiis*, as

Quintilian said of the style of Seneca, and we take pleasure in going astray. Exactitude incommodes us and rules we regard as puerilities. Thus it is that common logic (although it is more or less sufficient for the examination of arguments that tend towards certainty) is relegated to schoolboys; and there is not even a thought for a kind of logic which should determine the balance between probabilities, and would be so necessary in deliberations of importance. So true is it that our mistakes for the most part come from scorn or lack of the art of thinking: for nothing is more imperfect than our logic when we pass beyond necessary arguments. The most excellent philosophers of our time, such as the authors of *The Art of Thinking*, of *The Search for Truth* and of the *Essay concerning Human Understanding*, have been very far from indicating to us the true means fitted to assist the faculty whose business it is to make us weigh the probabilities of the true and the false: not to mention the art of discovery, in which success is still more difficult of attainment, and whereof we have nothing beyond very imperfect samples in mathematics.

32. One thing which might have contributed most towards M. Bayle's belief that the difficulties of reason in opposition to faith cannot be obviated is that he seems to demand that God be justified in some such manner as that commonly used for pleading the cause of a man accused before his judge. But he has not remembered that in the tribunals of men, which cannot always penetrate to the truth, one is often compelled to be guided by signs and probabilities, and above all by presumptions or prejudices; whereas it is agreed, as we have already observed, that Mysteries are not probable. For instance, M. Bayle will not have it that one can justify the goodness of God in the permission of sin, because probability would be against a man that should happen to be in circumstances comparable in our eyes to this permission. God foresees that Eve will be deceived by the serpent if he places her in the circumstances wherein she later found herself;

and nevertheless he placed her there. Now if a father or a guardian did the same in regard to his child or his ward, if a friend did so in regard to a young person whose behaviour was his concern, the judge would not be satisfied by the excuses of an advocate who said that the man only permitted the evil, without doing it or willing it: he would rather take this permission as a sign of ill intention, and would regard it as a sin of omission, which would render the one convicted thereof accessary in another's sin of commission.

33. But it must be borne in mind that when one has foreseen the evil and has not prevented it although it seems as if one could have done so with ease, and one has even done things that have facilitated it, it does not follow on that account *necessarily* that one is accessary thereto. It is only a very strong presumption, such as commonly replaces truth in human affairs, but which would be destroyed by an exact consideration of the facts, supposing we were capable of that in relation to God. For amongst lawyers that is called 'presumption' which must provisionally pass for truth in case the contrary is not proved; and it says more than 'conjecture', although the *Dictionary* of the Academy has not sifted the difference. Now there is every reason to conclude unquestionably that one would find through this consideration, if only it were attainable, that reasons most just, and stronger than those which appear contrary to them, have compelled the All-Wise to permit the evil, and even to do things which have facilitated it. Of this some instances will be given later.

34. It is none too easy, I confess, for a father, a guardian, a friend to have such reasons in the case under consideration. Yet the thing is not absolutely impossible, and a skilled writer of fiction might perchance find an extraordinary case that would even justify a man in the circumstances I have just indicated. But in reference to God there is no need to suppose or to establish particular reasons such as may have induced him to permit the

evil; general reasons suffice. One knows that he takes care of the whole universe, whereof all the parts are connected; and one must thence infer that he has had innumerable considerations whose result made him deem it inadvisable to prevent certain evils.

35. It should even be concluded that there must have been great or rather invincible reasons which prompted the divine Wisdom to the permission of the evil that surprises us, from the mere fact that this permission has occurred: for nothing can come from God that is not altogether consistent with goodness, justice and holiness. Thus we can judge by the event (or *a posteriori*) that the permission was indispensable, although it be not possible for us to show this (*a priori*) by the detailed reasons that God can have had therefor; as it is not necessary either that we show this to justify him. M. Bayle himself aptly says concerning that (*Reply to the Questions of a Provincial*, vol. III, ch. 165,): Sin made its way into the world; God therefore was able to permit it without detriment to his perfections; *ab actu ad potentiam valet consequentia.* In God this conclusion holds good: he did this, therefore he did it well. It is not, then, that we have no notion of justice in general fit to be applied also to God's justice; nor is it that God's justice has other rules than the justice known of men, but that the case in question is quite different from those which are common among men. Universal right is the same for God and for men; but the question of fact is quite different in their case and his.

36. We may even assume or pretend (as I have already observed) that there is something similar among men to this circumstance in God's actions. A man might give such great and strong proofs of his virtue and his holiness that all the most apparent reasons one could put forward against him to charge him with an alleged crime, for instance a larceny or murder, would deserve to be rejected as the calumnies of false witnesses or as an extraordinary play of chance which sometimes throws suspicion on the

most innocent. Thus in a case where every other would run the risk of being condemned or put to the torture (according to the laws of the country), this man would be absolved by his judges unanimously. Now in this case, which indeed is rare, but which is not impossible, one might say in a sense (*sano sensu*) that there is a conflict between reason and faith, and that the rules of law are other in respect of this person than they are in respect of the remainder of mankind. But that, when explained, will signify only that appearances of reason here give way before the faith that is due to the word and the integrity of this great and holy man, and that he is privileged above other men; not indeed as if there were one law for others and another for him, nor as if one had no understanding of what justice is in relation to him. It is rather because the rules of universal justice do not find here the application that they receive elsewhere, or because they favour him instead of accusing him, since there are in this personage qualities so admirable, that by virtue of a good logic of probabilities one should place more faith in his word than in that of many others.

37. Since it is permitted here to imagine possible cases, may one not suppose this incomparable man to be the Adept or the Possessor of

'that blessed Stone
Able to enrich all earthly Kings alone'

and that he spends every day prodigious sums in order to feed and to rescue from distress countless numbers of poor men? Be there never so many witnesses or appearances of every kind tending to prove that this great benefactor of the human race has just committed some larceny, is it not true that the whole earth would make mock of the accusation, however specious it might be? Now God is infinitely above the goodness and the power of this man, and consequently there are no reasons at all, however apparent they be, that can hold good against faith, that is, against the assurance or the confidence in God wherewith we can and ought to say that

God has done all things well. The objections are therefore not insoluble. They only involve prejudices and probabilities, which are, however, overthrown by reasons incomparably stronger. One must not say either that what we call *justice* is nothing in relation to God, that he is the absolute Master of all things even to the point of being able to condemn the innocent without violating his justice, or finally that justice is something arbitrary where he is concerned. Those are rash and dangerous expressions, whereunto some have been led astray to the discredit of the attributes of God. For if such were the case there would be no reason for praising his goodness and his justice: rather would it be as if the most wicked spirit, the Prince of evil genii, the evil principle of the Manichaeans, were the sole master of the universe, just as I observed before. What means would there be of distinguishing the true God from the false God of Zoroaster if all things depended upon the caprice of an arbitrary power and there were neither rule nor consideration for anything whatever?

38. It is therefore more than evident that nothing compels us to commit ourselves to a doctrine so strange, since it suffices to say that we have not enough knowledge of the facts when there is a question of answering probabilities which appear to throw doubt upon the justice and the goodness of God, and which would vanish away if the facts were well known to us. We need neither renounce reason in order to listen to faith nor blind ourselves in order to see clearly, as Queen Christine used to say: it is enough to reject ordinary appearances when they are contrary to Mysteries; and this is not contrary to reason, since even in natural things we are very often undeceived about appearances either by experience or by superior reasons. All that has been set down here in advance, only with the object of showing more plainly wherein the fault of the objections and the abuse of reason consists in the present case, where the claim is made that reason has greatest force against faith: we shall come afterwards to a more exact

discussion of that which concerns the origin of evil and the permission of sin with its consequences.

39. For now, it will be well to continue our examination of the important question of the use of reason in theology, and to make reflexions upon what M. Bayle has said thereon in divers passages of his works. As he paid particular attention in his *Historical and Critical Dictionary* to expounding the objections of the Manichaeans and those of the Pyrrhonians, and as this procedure had been criticized by some persons zealous for religion, he placed a dissertation at the end of the second edition of this *Dictionary*, which aimed at showing, by examples, by authorities and by reasons, the innocence and usefulness of his course of action. I am persuaded (as I have said above) that the specious objections one can urge against truth are very useful, and that they serve to confirm and to illumine it, giving opportunity to intelligent persons to find new openings or to turn the old to better account. But M. Bayle seeks therein a usefulness quite the reverse of this: it would be that of displaying the power of faith by showing that the truths it teaches cannot sustain the attacks of reason and that it nevertheless holds its own in the heart of the faithful. M. Nicole seems to call that ‘the triumph of God’s authority over human reason’, in the words of his quoted by M. Bayle in the third volume of his *Reply to the Questions of a Provincial* (ch. 177,). But since reason is a gift of God, even as faith is, contention between them would cause God to contend against God; and if the objections of reason against any article of faith are insoluble, then it must be said that this alleged article will be false and not revealed: this will be a chimera of the human mind, and the triumph of this faith will be capable of comparison with bonfires lighted after a defeat. Such is the doctrine of the damnation of unbaptized children, which M. Nicole would have us assume to be a consequence of original sin; such would be the eternal damnation of adults lacking the light that is necessary for the attainment of salvation.

40. Yet everyone need not enter into theological discussions; and persons whose condition allows not of exact researches should be content with instruction on faith, without being disturbed by the objections; and if some exceeding great difficulty should happen to strike them, it is permitted to them to avert the mind from it, offering to God a sacrifice of their curiosity: for when one is assured of a truth one has no need to listen to the objections. As there are many people whose faith is rather small and shallow to withstand such dangerous tests, I think one must not present them with that which might be poisonous for them; or, if one cannot hide from them what is only too public, the antidote must be added to it; that is to say, one must try to add the answer to the objection, certainly not withhold it as unobtainable.

41. The passages from the excellent theologians who speak of this triumph of faith can and should receive a meaning appropriate to the principles I have just affirmed. There appear in some objects of faith two great qualities capable of making it triumph over reason, the one is *incomprehensibility*, the other is *the lack of probability*. But one must beware of adding thereto the third quality whereof M. Bayle speaks, and of saying that what one believes is *indefensible*: for that would be to cause reason in its turn to triumph in a manner that would destroy faith. Incomprehensibility does not prevent us from believing even natural truths. For instance (as I have already pointed out) we do not comprehend the nature of odours and savours, and yet we are persuaded, by a kind of faith which we owe to the evidence of the senses, that these perceptible qualities are founded upon the nature of things and that they are not illusions.

42. There are also things contrary to appearances, which we admit when they are sufficiently verified. There is a little romance of Spanish origin, whose title states that one must not always believe what one sees. What was there more specious than the lie of the false Martin Guerre, who was

acknowledged as the true Martin by the true Martin's wife and relatives, and caused the judges and the relatives to waver for a long time even after the arrival of the other? Nevertheless the truth was known in the end. It is the same with faith. I have already observed that all one can oppose to the goodness and the justice of God is nothing but appearances, which would be strong against a man, but which are nullified when they are applied to God and when they are weighed against the proofs that assure us of the infinite perfection of his attributes. Thus faith triumphs over false reasons by means of sound and superior reasons that have made us embrace it; but it would not triumph if the contrary opinion had for it reasons as strong as or even stronger than those which form the foundation of faith, that is, if there were invincible and conclusive objections against faith.

43. It is well also to observe here that what M. Bayle calls a 'triumph of faith' is in part a triumph of demonstrative reason against apparent and deceptive reasons which are improperly set against the demonstrations. For it must be taken into consideration that the objections of the Manichaeans are hardly less contrary to natural theology than to revealed theology. And supposing one surrendered to them Holy Scripture, original sin, the grace of God in Jesus Christ, the pains of hell and the other articles of our religion, one would not even so be delivered from their objections: for one cannot deny that there is in the world physical evil (that is, suffering) and moral evil (that is, crime) and even that physical evil is not always distributed here on earth according to the proportion of moral evil, as it seems that justice demands. There remains, then, this question of natural theology, how a sole Principle, all-good, all-wise and all-powerful, has been able to admit evil, and especially to permit sin, and how it could resolve to make the wicked often happy and the good unhappy?

44. Now we have no need of revealed faith to know that there is such a sole Principle of all things, entirely good and wise. Reason teaches us this

by infallible proofs; and in consequence all the objections taken from the course of things, in which we observe imperfections, are only based on false appearances. For, if we were capable of understanding the universal harmony, we should see that what we are tempted to find fault with is connected with the plan most worthy of being chosen; in a word, we *should see*, and should not *believe* only, that what God has done is the best. I call 'seeing' here what one knows *a priori* by the causes; and 'believing' what one only judges by the effects, even though the one be as certainly known as the other. And one can apply here too the saying of St. Paul (2 Cor. v. 7), that we walk by *faith* and not by *sight*. For the infinite wisdom of God being known to us, we conclude that the evils we experience had to be permitted, and this we conclude from the effect or *a posteriori*, that is to say, because they exist. It is what M. Bayle acknowledges; and he ought to content himself with that, and not claim that one must put an end to the false appearances which are contrary thereto. It is as if one asked that there should be no more dreams or optical illusions.

45. And it is not to be doubted that this faith and this confidence in God, who gives us insight into his infinite goodness and prepares us for his love, in spite of the appearances of harshness that may repel us, are an admirable exercise for the virtues of Christian theology, when the divine grace in Jesus Christ arouses these motions within us. That is what Luther aptly observed in opposition to Erasmus, saying that it is love in the highest degree to love him who to flesh and blood appears so unlovable, so harsh toward the unfortunate and so ready to condemn, and to condemn for evils in which he appears to be the cause or accessary, at least in the eyes of those who allow themselves to be dazzled by false reasons. One may therefore say that the triumph of true reason illumined by divine grace is at the same time the triumph of faith and love.

46. M. Bayle appears to have taken the matter quite otherwise: he declares himself against reason, when he might have been content to censure its abuse. He quotes the words of Cotta in Cicero, where he goes so far as to say that if reason were a gift of the gods providence would be to blame for having given it, since it tends to our harm. M. Bayle also thinks that human reason is a source of destruction and not of edification (*Historical and Critical Dictionary*,, col. 2), that it is a runner who knows not where to stop, and who, like another Penelope, herself destroys her own work.

Destruit, aedificat, mutat quadrata rotundis.

(*Reply to the Questions of a Provincial*, vol. III,). But he takes pains especially to pile up many authorities one upon the other, in order to show that theologians of all parties reject the use of reason just as he does, and that they call attention to such gleams of reason as oppose religion only that they may sacrifice them to faith by a mere repudiation, answering nothing but the conclusion of the argument that is brought against them. He begins with the New Testament. Jesus Christ was content to say: 'Follow Me' (Luke v. 27; ix. 59). The Apostles said: 'Believe, and thou shalt be saved' (Acts xvi. 3). St. Paul acknowledges that his 'doctrine is obscure' (1 Cor. xiii. 12), that 'one can comprehend nothing therein' unless God impart a spiritual discernment, and without that it only passes for foolishness (1 Cor. ii. 14). He exhorts the faithful 'to beware of philosophy' (Col. ii. 8) and to avoid disputations in that science, which had caused many persons to lose faith.

47. As for the Fathers of the Church, M. Bayle refers us to the collection of passages from them against the use of philosophy and of reason which M. de Launoy made (*De Varia Aristotelis Fortuna,* ca) and especially to the passages from St. Augustine collected by M. Arnauld (against Mallet), which state: that the judgements of God are inscrutable; that they are not

any the less just for that they are unknown to us; that it is a deep abyss, which one cannot fathom without running the risk of falling down the precipice; that one cannot without temerity try to elucidate that which God willed to keep hidden; that his will cannot but be just; that many men, having tried to explain this incomprehensible depth, have fallen into vain imaginations and opinions full of error and bewilderment.

48. The Schoolmen have spoken in like manner. M. Bayle quotes a beautiful passage from Cardinal Cajetan (Part I, *Summ.* qu. 22, art. 4) to this effect: 'Our mind', he says, 'rests not upon the evidence of known truth but upon the impenetrable depth of hidden truth. And as St. Gregory says: He who believes touching the Divinity only that which he can gauge with his mind belittles the idea of God. Yet I do not surmise that it is necessary to deny any of the things which we know, or which we see as appertaining to the immutability, the actuality, the certainty, the universality, etc. of God: but I think that there is here some secret, either in regard to the relation which exists between God and the event, or in respect of what connects the event itself with his prevision. Thus, reflecting that the understanding of our soul is the eye of the owl, I find the soul's repose only in ignorance. For it is better both for the Catholic Faith and for Philosophic Faith to confess our blindness, than to affirm as evident what does not afford our mind the contentment which self-evidence gives. I do not accuse of presumption, on that account, all the learned men who stammeringly have endeavoured to suggest, as far as in them lay, the immobility and the sovereign and eternal efficacy of the understanding, of the will and of the power of God, through the infallibility of divine election and divine relation to all events. Nothing of all that interferes with my surmise that there is some depth which is hidden from us.' This passage of Cajetan is all the more notable since he was an author competent to reach the heart of the matter.

49. Luther's book against Erasmus is full of vigorous comments hostile to those who desire to submit revealed truths to the tribunal of our reason. Calvin often speaks in the same tone, against the inquisitive daring of those who seek to penetrate into the counsels of God. He declares in his treatise on predestination that God had just causes for damning some men, but causes unknown to us. Finally M. Bayle quotes sundry modern writers who have spoken to the same effect (*Reply to the Questions of a Provincial*, ch. 161 et seq.).

50. But all these expressions and innumerable others like them do not prove that the objections opposed to faith are so insoluble as M. Bayle supposes. It is true that the counsels of God are inscrutable, but there is no invincible objection which tends to the conclusion that they are unjust. What appears injustice on the part of God, and foolishness in our faith, only appears so. The famous passage of Tertullian (*De Carne Christi*), 'mortuus est Dei filius, credibile est, quia ineptum est; et sepultus revixit, certum est, quia impossibile', is a sally that can only be meant to concern appearances of absurdity. There are others like them in Luther's book on *Freewill in Bondage*, as when he says (ch. 174): 'Si placet tibi Deus indignos coronans, non debet displicere immeritos damnans.' Which being reduced to more temperate phrasing, means: If you approve that God give eternal glory to those who are not better than the rest, you should not disapprove that he abandon those who are not worse than the rest. And to judge that he speaks only of appearances of injustice, one only has to weigh these words of the same author taken from the same book: 'In all the rest', he says, 'we recognize in God a supreme majesty; there is only justice that we dare to question: and we will not believe provisionally [tantisper] that he is just, albeit he has promised us that the time shall come when his glory being revealed all men shall see clearly that he has been and that he is just.'

51. It will be found also that when the Fathers entered into a discussion they did not simply reject reason. And, in disputations with the pagans, they endeavour usually to show how paganism is contrary to reason, and how the Christian religion has the better of it on that side also. Origen showed Celsus how reasonable Christianity is and why, notwithstanding, the majority of Christians should believe without examination. Celsus had jeered at the behaviour of Christians, 'who, willing', he said, 'neither to listen to your reasons nor to give you any for what they believe, are content to say to you: Examine not, only believe, or: Your faith will save you; and they hold this as a maxim, that the wisdom of the world is an evil.'

52. Origen gives the answer of a wise man, and in conformity with the principles we have established in the matter. For reason, far from being contrary to Christianity, serves as a foundation for this religion, and will bring about its acceptance by those who can achieve the examination of it. But, as few people are capable of this, the heavenly gift of plain faith tending towards good suffices for men in general. 'If it were possible', he says, 'for all men, neglecting the affairs of life, to apply themselves to study and meditation, one need seek no other way to make them accept the Christian religion. For, to say nothing likely to offend anyone' (he insinuates that the pagan religion is absurd, but he will not say so explicitly), 'there will be found therein no less exactitude than elsewhere, whether in the discussion of its dogmas, or in the elucidation of the enigmatical expressions of its prophets, or in the interpretation of the parables of its gospels and of countless other things happening or ordained symbolically. But since neither the necessities of life nor the infirmities of men permit of this application to study, save for a very small number of persons, what means could one find more qualified to benefit everyone else in the world than those Jesus Christ wished to be used for the conversion of the nations? And I would fain ask with regard to the great number of those

who believe, and who thereby have withdrawn themselves from the quagmire of vices wherein before they were plunged, which would be the better: to have thus changed one's morals and reformed one's life, believing without examination that there are punishments for sin and rewards for good actions; or to have waited for one's conversion until one not only believed but had examined with care the foundations of these dogmas? It is certain that, were this method to be followed, few indeed would reach that point whither they are led by their plain and simple faith, but the majority would remain in their corruption.'

53. M. Bayle (in his explanation concerning the objections of the Manichaeans, placed at the end of the second edition of the *Dictionary*) takes those words where Origen points out that religion can stand the test of having her dogmas discussed, as if it were not meant in relation to philosophy, but only in relation to the accuracy wherewith the authority and the true meaning of Holy Scripture is established. But there is nothing to indicate this restriction. Origen wrote against a philosopher whom such a restriction would not have suited. And it appears that this Father wished to point out that among Christians there was no less exactitude than among the Stoics and some other philosophers, who established their doctrine as much by reason as by authorities, as, for example, Chrysippus did, who found his philosophy even in the symbols of pagan antiquity.

54. Celsus brings up still another objection to the Christians, in the same place. 'If they withdraw', he says, 'regularly into their "Examine not, only believe", they must tell me at least what are the things they wish me to believe.' Therein he is doubtless right, and that tells against those who would say that God is good and just, and who yet would maintain that we have no notion of goodness and of justice when we attribute these perfections to him. But one must not always demand what I call 'adequate notions', involving nothing that is not explained, since even perceptible

qualities, like heat, light, sweetness, cannot give us such notions. Thus we agreed that Mysteries should receive an explanation, but this explanation is imperfect. It suffices for us to have some analogical understanding of a Mystery such as the Trinity and the Incarnation, to the end that in accepting them we pronounce not words altogether devoid of meaning: but it is not necessary that the explanation go as far as we would wish, that is, to the extent of comprehension and to the *how*.

55. It appears strange therefore that M. Bayle rejects the tribunal of *common notions* (in the third volume of his *Reply to the Questions of a Provincial*, p and 1140) as if one should not consult the idea of goodness in answering the Manichaeans; whereas he had declared himself quite differently in his *Dictionary*. Of necessity there must be agreement upon the meaning of *good* and *bad*, amongst those who are in dispute over the question whether there is only one principle, altogether good, or whether there are two, the one good and the other bad. We understand something by union when we are told of the union of one body with another or of a substance with its accident, of a subject with its adjunct, of the place with the moving body, of the act with the potency; we also mean something when we speak of the union of the soul with the body to make thereof one single person. For albeit I do not hold that the soul changes the laws of the body, or that the body changes the laws of the soul, and I have introduced the Pre-established Harmony to avoid this derangement, I nevertheless admit a true union between the soul and the body, which makes thereof a suppositum. This union belongs to the metaphysical, whereas a union of influence would belong to the physical. But when we speak of the union of the Word of God with human nature we should be content with an analogical knowledge, such as the comparison of the union of the soul with the body is capable of giving us. We should, moreover, be content to say

that the Incarnation is the closest union that can exist between the Creator and the creature; and further we should not want to go.

56. It is the same with the other Mysteries, where moderate minds will ever find an explanation sufficient for belief, but never such as would be necessary for understanding. A certain *what it is* (τι εστι) is enough for us, but the *how* (πως) is beyond us, and is not necessary for us. One may say concerning the explanations of Mysteries which are given out here and there, what the Queen of Sweden inscribed upon a medal concerning the crown she had abandoned, 'Non mi bisogna, e non mi basta.' Nor have we any need either (as I have already observed) to prove the Mysteries *a priori*, or to give a reason for them; it suffices us *that the thing is thus* (το ὅτι) even though we know not the *why* (το διοτι), which God has reserved for himself. These lines, written on that theme by Joseph Scaliger, are beautiful and renowned:

Ne curiosus quaere causas omnium,
Quaecumque libris vis Prophetarum indidit
Afflata caelo, plena veraci Deo:
Nec operta sacri supparo silentii
Irrumpere aude, sed pudenter praeteri.

Nescire velle, quae Magister optimus
Docere non vult, erudita inscitia est.

M. Bayle, who quotes them (*Reply to the Questions of a Provincial*, vol. III,), holds the likely opinion that Scaliger made them upon the disputes between Arminius and Gomarus. I think M. Bayle repeated them from memory, for he put *sacrata* instead of *afflata*. But it is apparently the printer's fault that *prudenter* stands in place of *pudenter* (that is, modestly) which the metre requires.

57. Nothing can be more judicious than the warning these lines contain; and M. Bayle is right in saying () that those who claim that the behaviour of God with respect to sin and the consequences of sin contains nothing but what they can account for, deliver themselves up to the mercy of their adversary. But he is not right in combining here two very different things, 'to account for a thing', and 'to uphold it against objections'; as he does when he presently adds: 'They are obliged to follow him [their adversary] everywhere whither he shall wish to lead them, and it would be to retire ignominiously and ask for quarter, if they were to admit that our intelligence is too weak to remove completely all the objections advanced by a philosopher.'

58. It seems here that, according to M. Bayle, 'accounting for' comes short of 'answering objections', since he threatens one who should undertake the first with the resulting obligation to pass on to the second. But it is quite the opposite: he who maintains a thesis (the *respondens*) is not bound to account for it, but he is bound to meet the objections of an opponent. A defendant in law is not bound (as a general rule) to prove his right or to produce his title to possession; but he is obliged to reply to the arguments of the plaintiff. I have marvelled many times that a writer so precise and so shrewd as M. Bayle so often here confuses things where so much difference exists as between these three acts of reason: to comprehend, to prove, and to answer objections; as if when it is a question of the use of reason in theology one term were as good as another. Thus he says in his posthumous Conversations,: 'There is no principle which M. Bayle has more often inculcated than this, that the incomprehensibility of a dogma and the insolubility of the objections that oppose it provide no legitimate reason for rejecting it.' This is true as regards the incomprehensibility, but it is not the same with the insolubility. And it is indeed just as if one said that an invincible reason against a thesis was not a

legitimate reason for rejecting it. For what other legitimate reason for rejecting an opinion can one find, if an invincible opposing argument is not such an one? And what means shall one have thereafter of demonstrating the falsity, and even the absurdity, of any opinion?

59. It is well to observe also that he who proves a thing *a priori* accounts for it through the efficient cause; and whosoever can thus account for it in a precise and adequate manner is also in a position to comprehend the thing. Therefore it was that the Scholastic theologians had already censured Raymond Lully for having undertaken to demonstrate the Trinity by philosophy. This so-called demonstration is to be found in his *Works*; and Bartholomaeus Keckermann, a writer renowned in the Reformed party, having made an attempt of just the same kind upon the same Mystery, has been no less censured for it by some modern theologians. Therefore censure will fall upon those who shall wish to account for this Mystery and make it comprehensible, but praise will be given to those who shall toil to uphold it against the objections of adversaries.

60. I have said already that theologians usually distinguish between what is above reason and what is against reason. They place *above* reason that which one cannot comprehend and which one cannot account for. But *against* reason will be all opinion that is opposed by invincible reasons, or the contrary of which can be proved in a precise and sound manner. They avow, therefore, that the Mysteries are above reason, but they do not admit that they are contrary to it. The English author of a book which is ingenious, but has met with disapproval, entitled *Christianity not Mysterious*, wished to combat this distinction; but it does not seem to me that he has at all weakened it. M. Bayle also is not quite satisfied with this accepted distinction. This is what he says on the matter (vol. III of the *Reply to the Questions of a Provincial*, ch. 158). Firstly () he distinguishes, together with M. Saurin, between these two theses: the one, *all the dogmas of Christianity*

are in conformity with reason; the other, *human reason knows that they are in conformity with reason*. He affirms the first and denies the second. I am of the same opinion, if in saying 'that a dogma conforms to reason' one means that it is possible to account for it or to explain its *how* by reason; for God could doubtless do so, and we cannot. But I think that one must affirm both theses if by 'knowing that a dogma conforms to reason' one means that we can demonstrate, if need be, that there is no contradiction between this dogma and reason, repudiating the objections of those who maintain that this dogma is an absurdity.

61. M. Bayle explains himself here in a manner not at all convincing. He acknowledges fully that our Mysteries are in accordance with the supreme and universal reason that is in the divine understanding, or with reason in general; yet he denies that they are in accordance with that part of reason which man employs to judge things. But this portion of reason which we possess is a gift of God, and consists in the natural light that has remained with us in the midst of corruption; thus it is in accordance with the whole, and it differs from that which is in God only as a drop of water differs from the ocean or rather as the finite from the infinite. Therefore Mysteries may transcend it, but they cannot be contrary to it. One cannot be contrary to one part without being contrary to the whole. That which contradicts a proposition of Euclid is contrary to the *Elements* of Euclid. That which in us is contrary to the Mysteries is not reason nor is it the natural light or the linking together of truths; it is corruption, or error, or prejudice, or darkness.

62. M. Bayle () is not satisfied with the opinion of Josua Stegman and of M. Turretin, Protestant theologians who teach that the Mysteries are contrary only to corrupt reason. He asks, mockingly, whether by right reason is meant perchance that of an orthodox theologian and by corrupt reason that of an heretic; and he urges the objection that the evidence of the Mystery of the Trinity was no greater in the soul of Luther than in the soul

of Socinius. But as M. Descartes has well observed, good sense is distributed to all: thus one must believe that both the orthodox and heretics are endowed therewith. Right reason is a linking together of truths, corrupt reason is mixed with prejudices and passions. And in order to discriminate between the two, one need but proceed in good order, admit no thesis without proof, and admit no proof unless it be in proper form, according to the commonest rules of logic. One needs neither any other criterion nor other arbitrator in questions of reason. It is only through lack of this consideration that a handle has been given to the sceptics, and that even in theology François Véron and some others, who exacerbated the dispute with the Protestants, even to the point of dishonesty, plunged headlong into scepticism in order to prove the necessity of accepting an infallible external judge. Their course meets with no approval from the most expert, even in their own party: Calixtus and Daillé derided it as it deserved, and Bellarmine argued quite otherwise.

63. Now let us come to what M. Bayle says () on the distinction we are concerned with. ‘It seems to me’, he says, ‘that an ambiguity has crept into the celebrated distinction drawn between things that are above reason and things that are against reason. The Mysteries of the Gospel are above reason, so it is usually said, but they are not contrary to reason. I think that the same sense is not given to the word reason in the first part of this axiom as in the second: by the first is understood rather the reason of man, or reason *in concreto* and by the second reason in general, or reason *in abstracto*. For supposing that it is understood always as reason in general or the supreme reason, the universal reason that is in God, it is equally true that the Mysteries of the Gospels are not above reason and that they are not against reason. But if in both parts of the axiom human reason is meant, I do not clearly see the soundness of the distinction: for the most orthodox confess that we know not how our Mysteries can conform to the maxims of

philosophy. It seems to us, therefore, that they are not in conformity with our reason. Now that which appears to us not to be in conformity with our reason appears contrary to our reason, just as that which appears to us not in conformity with truth appears contrary to truth. Thus why should not one say, equally, that the Mysteries are against our feeble reason, and that they are above our feeble reason?' I answer, as I have done already, that 'reason' here is the linking together of the truths that we know by the light of nature, and in this sense the axiom is true and without any ambiguity. The Mysteries transcend our reason, since they contain truths that are not comprised in this sequence; but they are not contrary to our reason, and they do not contradict any of the truths whereto this sequence can lead us. Accordingly there is no question here of the universal reason that is in God, but of our reason. As for the question whether we know the Mysteries to conform with our reason, I answer that at least we never know of any non-conformity or any opposition between the Mysteries and reason. Moreover, we can always abolish such alleged opposition, and so, if this can be called reconciling or harmonizing faith with reason, or recognizing the conformity between them, it must be said that we can recognize this conformity and this harmony. But if the conformity consists in a reasonable explanation of the *how*, we cannot recognize it.

64. M. Bayle makes one more ingenious objection, which he draws from the example of the sense of sight. 'When a square tower', he says, 'from a distance appears to us round, our eyes testify very clearly not only that they perceive nothing square in this tower, but also that they discover there a round shape, incompatible with the square shape. One may therefore say that the truth which is the square shape is not only above, but even against, the witness of our feeble sight.' It must be admitted that this observation is correct, and although it be true that the appearance of roundness comes simply from the effacement of the angles, which distance causes to

disappear, it is true, notwithstanding, that the round and the square are opposites. Therefore my answer to this objection is that the representation of the senses, even when they do all that in them lies, is often contrary to the truth; but it is not the same with the faculty of reasoning, when it does its duty, since a strictly reasoned argument is nothing but a linking together of truths. And as for the sense of sight in particular, it is well to consider that there are yet other false appearances which come not from the 'feebleness of our eyes' nor from the loss of visibility brought about by distance, but from the very *nature of vision*, however perfect it be. It is thus, for instance, that the circle seen sideways is changed into that kind of oval which among geometricians is known as an ellipse, and sometimes even into a parabola or a hyperbola, or actually into a straight line, witness the ring of Saturn.

65. The *external* senses, properly speaking, do not deceive us. It is our inner sense which often makes us go too fast. That occurs also in brute beasts, as when a dog barks at his reflexion in the mirror: for beasts have *consecutions* of perception which resemble reasoning, and which occur also in the inner sense of men, when their actions have only an empirical quality. But beasts do nothing which compels us to believe that they have what deserves to be properly called a *reasoning* sense, as I have shown elsewhere. Now when the understanding uses and follows the false decision of the inner sense (as when the famous Galileo thought that Saturn had two handles) it is deceived by the judgement it makes upon the effect of appearances, and it infers from them more than they imply. For the appearances of the senses do not promise us absolutely the truth of things, any more than dreams do. It is we who deceive ourselves by the use we make of them, that is, by our consecutions. Indeed we allow ourselves to be deluded by probable arguments, and we are inclined to think that phenomena such as we have found linked together often are so always.

Thus, as it happens usually that that which appears without angles has none, we readily believe it to be always thus. Such an error is pardonable, and sometimes inevitable, when it is necessary to act promptly and choose that which appearances recommend; but when we have the leisure and the time to collect our thoughts, we are in fault if we take for certain that which is not so. It is therefore true that appearances are often contrary to truth, but our reasoning never is when it proceeds strictly in accordance with the rules of the art of reasoning. If by *reason* one meant generally the faculty of reasoning whether well or ill, I confess that it might deceive us, and does indeed deceive us, and the appearances of our understanding are often as deceptive as those of the senses: but here it is a question of the linking together of truths and of objections in due form, and in this sense it is impossible for reason to deceive us.

66. Thus it may be seen from all I have just said that M. Bayle carries too far *the being above reason*, as if it included the insoluble nature of objections: for according to him (*Reply to the Questions of a Provincial*, vol. III, ch. 130,) ‘once a dogma is above reason, philosophy can neither explain it nor comprehend it, nor meet the difficulties that are urged against it’. I agree with regard to comprehension, but I have already shown that the Mysteries receive a necessary verbal explanation, to the end that the terms employed be not *sine mente soni*, words signifying nothing. I have shown also that it is necessary for one to be capable of answering the objections, and that otherwise one must needs reject the thesis.

67. He adduces the authority of theologians, who appear to recognize the insoluble nature of the objections against the Mysteries. Luther is one of the chief of these; but I have already replied, in § 12, to the passage where he seems to say that philosophy contradicts theology. There is another passage (*De Servo Arbitrio*, ch. 246) where he says that the apparent injustice of God is proved by arguments taken from the adversity of good people and

the prosperity of the wicked, an argument irresistible both for all reason and for natural intelligence (‘Argumentis talibus traducta, quibus nulla ratio aut lumen naturae potest resistere’). But soon afterwards he shows that he means it only of those who know nothing of the life to come, since he adds that an expression in the Gospel dissipates this difficulty, teaching us that there is another life, where that which has not been punished and rewarded in this life shall receive its due. The objection is then far from being insuperable, and even without the aid of the Gospel one could bethink oneself of this answer. There is also quoted (*Reply*, vol. III,) a passage from Martin Chemnitz, criticized by Vedelius and defended by Johann Musaeus, where this famous theologian seems to say clearly that there are truths in the word of God which are not only above reason but also against reason. But this passage must be taken as referring only to the principles of reason that are in accordance with the order of Nature, as Musaeus also interprets it.

68. It is true nevertheless that M. Bayle finds some authorities who are more favourable to him, M. Descartes being one of the chief. This great man says positively (Part I of his *Principles*, art. 41) ‘that we shall have not the slightest trouble in ridding ourselves of the difficulty’ (which one may have in harmonizing the freedom of our will with the order of the eternal providence of God) ‘if we observe that our thought is finite, and that the Knowledge and the Omnipotence of God, whereby he has not only known from all eternity all that which is or which can be, but also has willed it, is infinite. We have therefore quite enough intelligence to recognize clearly and distinctly that this knowledge and this power are in God; but we have not enough so to comprehend their scope that we can know how they leave the actions of men entirely free and undetermined. Yet the Power and the Knowledge of God must not prevent us from believing that we have a free will; for we should be wrong to doubt of that whereof we are inwardly

conscious, and which we know by experience to be within us, simply because we do not comprehend some other thing which we know to be incomprehensible in its nature.'

69. This passage from M. Descartes, followed by his adherents (who rarely think of doubting what he asserts), has always appeared strange to me. Not content with saying that, as for him, he sees no way of reconciling the two dogmas, he puts the whole human race, and even all rational creatures, in the same case. Yet could he have been unaware that there is no possibility of an insuperable objection against truth? For such an objection could only be a necessary linking together of other truths whose result would be contrary to the truth that one maintains; and consequently there would be contradiction between the truths, which would be an utter absurdity. Moreover, albeit our mind is finite and cannot comprehend the infinite, of the infinite nevertheless it has proofs whose strength or weakness it comprehends; why then should it not have the same comprehension in regard to the objections? And since the power and the wisdom of God are infinite and comprehend everything, there is no pretext for doubting their scope. Further, M. Descartes demands a freedom which is not needed, by his insistence that the actions of the will of man are altogether undetermined, a thing which never happens. Finally, M. Bayle himself maintains that this experience or this inward sense of our independence, upon which M. Descartes founds the proof of our freedom, does not prove it: for from the fact that we are not conscious of the causes whereon we depend, it does not follow, according to M. Bayle, that we are independent. But that is something we will speak of in its proper place.

70. It seems that M. Descartes confesses also, in a passage of his *Principles*, that it is impossible to find an answer to the difficulties on the division of matter to infinity, which he nevertheless recognizes as actual. Arriaga and other Schoolmen make well-nigh the same confession: but if

they took the trouble to give to the objections the form these ought to have, they would see that there are faults in the reasoning, and sometimes false assumptions which cause confusion. Here is an example. A man of parts one day brought up to me an objection in the following form: Let the straight line BA be cut in two equal parts at the point C, and the part CA at the point D, and the part DA at the point E, and so on to infinity; all the halves, BC, CD, DE, etc. together make the whole BA; therefore there must be a last half, since the straight line BA finishes at A. But this last half is absurd: for since it is a line, it will be possible again to cut it in two. Therefore division to infinity cannot be admitted. But I pointed out to him that one is not justified in the inference that there must be a last half, although there be a last point A, for this last point belongs to all the halves of its side. And my friend acknowledged it himself when he endeavoured to prove this deduction by a formal argument; on the contrary, just because the division goes on to infinity, there is no last half. And although the straight line AB be finite, it does not follow that the process of dividing it has any final end. The same confusion arises with the series of numbers going on to infinity. One imagines a final end, a number that is infinite, or infinitely small; but that is all simple fiction. Every number is finite and specific; every line is so likewise, and the infinite or infinitely small signify only magnitudes that one may take as great or as small as one wishes, to show that an error is smaller than that which has been specified, that is to say, that there is no error; or else by the infinitely small is meant the state of a magnitude at its vanishing point or its beginning, conceived after the pattern of magnitudes already actualized.

71. It will, however, be well to consider the argument that M. Bayle puts forward to show that one cannot refute the objections which reason opposes to the Mysteries. It is in his comment on the Manichaeans (of the second edition of his *Dictionary*). ‘It is enough for me’, he says, ‘that it be

unanimously acknowledged that the Mysteries of the Gospel are above reason. For thence comes the necessary conclusion that it is impossible to settle the difficulties raised by the philosophers, and in consequence that a dispute where only the light of Nature is followed will always end unfavourably for the theologians, and that they will see themselves forced to give way and to take refuge in the canon of the supernatural light.' I am surprised that M. Bayle speaks in such general terms, since he has acknowledged himself that the light of Nature is against the Manichaeans, and for the oneness of the Principle, and that the goodness of God is proved incontrovertibly by reason. Yet this is how he continues:

72. 'It is evident that reason can never attain to that which is above it. Now if it could supply answers to the objections which are opposed to the dogma of the Trinity and that of hypostatic union, it would attain to those two Mysteries, it would have them in subjection and submit them to the strictest examination by comparison with its first principles, or with the aphorisms that spring from common notions, and proceed until finally it had drawn the conclusion that they are in accordance with natural light. It would therefore do what exceeds its powers, it would soar above its confines, and that is a formal contradiction. One must therefore say that it cannot provide answers to its own objections, and that thus they remain victorious, so long as one does not have recourse to the authority of God and to the necessity of subjugating one's understanding to the obedience of faith.' I do not find that there is any force in this reasoning. We can attain to that which is above us not by penetrating it but by maintaining it; as we can attain to the sky by sight, and not by touch. Nor is it necessary that, in order to answer the objections which are made against the Mysteries, one should have them in subjection to oneself, and submit them to examination by comparison with the first principles that spring from common notions. For if he who answers the objections had to go so far, he who proposes the objections needs must

do it first. It is the part of the objection to open up the subject, and it is enough for him who answers to say Yes or No. He is not obliged to counter with a distinction: it will do, in case of need, if he denies the universality of some proposition in the objection or criticizes its form, and one may do both these things without penetrating beyond the objection. When someone offers me a proof which he maintains is invincible, I can keep silence while I compel him merely to prove in due form all the enunciations that he brings forward, and such as appear to me in the slightest degree doubtful. For the purpose of doubting only, I need not at all probe to the heart of the matter; on the contrary, the more ignorant I am the more shall I be justified in doubting. M. Bayle continues thus:

73. 'Let us endeavour to clarify that. If some doctrines are above reason they are beyond its reach, it cannot attain to them; if it cannot attain to them, it cannot comprehend them.' (He could have begun here with the 'comprehend', saying that reason cannot comprehend that which is above it.) 'If it cannot comprehend them, it can find in them no idea' (*Non valet consequentia*: for, to 'comprehend' something, it is not enough that one have some ideas thereof; one must have all the ideas of everything that goes to make it up, and all these ideas must be clear, distinct, *adequate*. There are a thousand objects in Nature in which we understand something, but which we do not therefore necessarily comprehend. We have some ideas on the rays of light, we demonstrate upon them up to a certain point; but there ever remains something which makes us confess that we do not yet comprehend the whole nature of light.) 'nor any principle such as may give rise to a solution;' (Why should not evident principles be found mingled with obscure and confused knowledge?) 'and consequently the objections that reason has made will remain unanswered;' (By no means; the difficulty is rather on the side of the opposer. It is for him to seek an evident principle such as may give rise to some objection; and the more obscure the subject,

the more trouble he will have in finding such a principle. Moreover, when he has found it he will have still more trouble in demonstrating an opposition between the principle and the Mystery: for, if it happened that the Mystery was evidently contrary to an evident principle, it would not be an obscure Mystery, it would be a manifest absurdity.) ‘or what is the same thing, answer will be made with some distinction as obscure as the very thesis that will have been attacked.’ (One can do without distinctions, if need be, by denying either some premiss or some conclusion; and when one is doubtful of the meaning of some term used by the opposer one may demand of him its definition. Thus the defender has no need to incommode himself when it is a question of answering an adversary who claims that he is offering us an invincible proof. But even supposing that the defender, perchance being kindly disposed, or for the sake of brevity, or because he feels himself strong enough, should himself vouchsafe to show the ambiguity concealed in the objection, and to remove it by making some distinction, this distinction need not of necessity lead to anything clearer than the first thesis, since the defender is not obliged to elucidate the Mystery itself.)

74. ‘Now it is certain’, so M. Bayle continues, ‘that an objection which is founded on distinct notions remains equally victorious, whether you give to it no answer, or you make an answer where none can comprehend anything. Can the contest be equal between a man who alleges in objection to you that which you and he very clearly conceive, and you, who can only defend yourself by answers wherein neither of you understands anything?’ (It is not enough that the objection be founded on quite distinct notions, it is necessary also that one apply it in contradiction of the thesis. And when I answer someone by denying some premiss, in order to compel him to prove it, or some conclusion, to compel him to put it in good form, it cannot be said that I answer nothing or that I answer nothing intelligible. For as it is

the doubtful premiss of the adversary that I deny, my denial will be as intelligible as his affirmation. Finally, when I am so obliging as to explain myself by means of some distinction, it suffices that the terms I employ have some meaning, as in the Mystery itself. Thus something in my answer will be comprehended: but one need not of necessity comprehend all that it involves; otherwise one would comprehend the Mystery also.)

75. M. Bayle continues thus: 'Every philosophical dispute assumes that the disputant parties agree on certain definitions' (This would be desirable, but usually it is only in the dispute itself that one reaches such a point, if the necessity arises.) 'and that they admit the rules of Syllogisms, and the signs for the recognition of bad arguments. After that everything lies in the investigation as to whether a thesis conforms mediately or immediately to the principles one is agreed upon' (which is done by means of the syllogisms of him who makes objections); 'whether the premisses of a proof (advanced by the opposer) 'are true; whether the conclusion is properly drawn; whether a four-term Syllogism has been employed; whether some aphorism of the chapter *de oppositis* or *de sophisticis elenchis*, etc. has not been violated.' (It is enough, putting it briefly, to deny some premiss or some conclusion, or finally to explain or get explained some ambiguous term.) 'One comes off victorious either by showing that the subject of dispute has no connexion with the principles which had been agreed upon' (that is to say, by showing that the objection proves nothing, and then the defender wins the case), 'or by reducing the defender to absurdity' (when all the premisses and all the conclusions are well proved). 'Now one can reduce him to that point either by showing him that the conclusions of his thesis are "yes" and "no" at once, or by constraining him to say only intelligible things in answer.' (This last embarrassment he can always avoid, because he has no need to advance new theses.) 'The aim in disputes of this kind is to throw light upon obscurities and to arrive at self-

evidence.' (It is the aim of the opposer, for he wishes to demonstrate that the Mystery is false; but this cannot here be the aim of the defender, for in admitting Mystery he agrees that one cannot demonstrate it.) 'This leads to the opinion that during the course of the proceedings victory sides more or less with the defender or with the opposer, according to whether there is more or less clarity in the propositions of the one than in the propositions of the other.' (That is speaking as if the defender and the opposer were equally unprotected; but the defender is like a besieged commander, covered by his defence works, and it is for the attacker to destroy them. The defender has no need here of self-evidence, and he seeks it not: but it is for the opposer to find it against him, and to break through with his batteries in order that the defender may be no longer protected.)

76. 'Finally, it is judged that victory goes against him whose answers are such that one comprehends nothing in them,' (It is a very equivocal sign of victory: for then one must needs ask the audience if they comprehend anything in what has been said, and often their opinions would be divided. The order of formal disputes is to proceed by arguments in due form and to answer them by denying or making a distinction.) 'and who confesses that they are incomprehensible.' (It is permitted to him who maintains the truth of a Mystery to confess that this mystery is incomprehensible; and if this confession were sufficient for declaring him vanquished there would be no need of objection. It will be possible for a truth to be incomprehensible, but never so far as to justify the statement that one comprehends nothing at all therein. It would be in that case what the ancient Schools called *Scindapsus* or *Blityri* (Clem. Alex. *Stromateis*, 8), that is, words devoid of meaning.) 'He is condemned thenceforth by the rules for awarding victory; and even when he cannot be pursued in the mist wherewith he has covered himself, and which forms a kind of abyss between him and his antagonists, he is believed to be utterly defeated, and is compared to an army which, having

lost the battle, steals away from the pursuit of the victor only under cover of night.' (Matching allegory with allegory, I will say that the defender is not vanquished so long as he remains protected by his entrenchments; and if he risks some sortie beyond his need, it is permitted to him to withdraw within his fort, without being open to blame for that.)

77. I was especially at pains to analyse this long passage where M. Bayle has put down his strongest and most skilfully reasoned statements in support of his opinion: and I hope that I have shown clearly how this excellent man has been misled. That happens all too easily to the ablest and shrewdest persons when they give free rein to their wit without exercising the patience necessary for delving down to the very foundations of their systems. The details we have entered into here will serve as answer to some other arguments upon the subject which are dispersed through the works of M. Bayle, as for instance when he says in his *Reply to the Questions of a Provincial* (vol. III, ch. 133,): 'To prove that one has brought reason and religion into harmony one must show not only that one has philosophic maxims favourable to our faith, but also that the particular maxims cast up against us as not being consistent with our Catechism are in reality consistent with it in a clearly conceived way.' I do not see that one has need of all that, unless one aspire to press reasoning as far as the *how* of the Mystery. When one is content to uphold its truth, without attempting to render it comprehensible, one has no need to resort to philosophic maxims, general or particular, for the proof; and when another brings up some philosophic maxims against us, it is not for us to prove clearly and distinctly that these maxims are consistent with our dogma, but it is for our opponent to prove that they are contrary thereto.

78. M. Bayle continues thus in the same passage: 'For this result we need an answer as clearly evident as the objection.' I have already shown that it is obtained when one denies the premisses, but that for the rest it is not

necessary for him who maintains the truth of the Mystery always to advance evident propositions, since the principal thesis concerning the Mystery itself is not evident. He adds further: ‘If we must make reply and rejoinder, we must never rest in our positions, nor claim that we have accomplished our design, so long as our opponent shall make answer with things as evident as our reasons can be.’ But it is not for the defender to adduce reasons; it is enough for him to answer those of his opponent.

79. Finally the author draws the conclusion: ‘If it were claimed that, on making an evident objection, a man has to be satisfied with an answer which we can only state as a thing possible though incomprehensible to us, that would be unfair.’ He repeats this in the posthumous Dialogues, against M. Jacquelot, I am not of this opinion. If the objection were completely evident, it would triumph, and the thesis would be overthrown. But when the objection is only founded on appearances or on instances of the most frequent occurrence, and when he who makes it desires to draw from it a universal and certain conclusion, he who upholds the Mystery may answer with the instance of a bare possibility. For such an instance suffices to show that what one wished to infer from the premisses, is neither certain nor general; and it suffices for him who upholds the Mystery to maintain that it is possible, without having to maintain that it is probable. For, as I have often said, it is agreed that the Mysteries are against appearances. He who upholds the Mystery need not even adduce such an instance; and should he adduce it, it were indeed a work of supererogation, or else an instrument of greater confusion to the adversary.

80. There are passages of M. Bayle in the posthumous reply that he made to M. Jacquelot which seem to me still worthy of scrutiny. ‘M. Bayle’ (according to p, 37) ‘constantly asserts in his *Dictionary*, whenever the subject allows, that our reason is more capable of refuting and destroying than of proving and building; that there is scarcely any philosophical or

theological matter in respect of which it does not create great difficulties. Thus', he says, 'if one desired to follow it in a disputatious spirit, as far as it can go, one would often be reduced to a state of troublesome perplexity; and in fine, there are doctrines certainly true, which it disputes with insoluble objections.' I think that what is said here in reproach of reason is to its advantage. When it overthrows some thesis, it builds up the opposing thesis. And when it seems to be overthrowing the two opposing theses at the same time, it is then that it promises us something profound, provided that we follow it *as far as it can go*, not in a disputatious spirit but with an ardent desire to search out and discover the truth, which will always be recompensed with a great measure of success.

81. M. Bayle continues: 'that one must then ridicule these objections, recognizing the narrow bounds of the human mind.' And I think, on the other hand, that one must recognize the signs of the force of the human mind, which causes it to penetrate into the heart of things. These are new openings and, as it were, rays of the dawn which promises us a greater light: I mean in philosophical subjects or those of natural theology. But when these objections are made against revealed faith it is enough that one be able to repel them, provided that one do so in a submissive and zealous spirit, with intent to sustain and exalt the glory of God. And when we succeed in respect of his justice, we shall likewise be impressed by his greatness and charmed by his goodness, which will show themselves through the clouds of a seeming reason that is deceived by outward appearances, in proportion as the mind is elevated by true reason to that which to us is invisible, but none the less sure.

82. 'Thus' (to continue with M. Bayle) 'reason will be compelled to lay down its arms, and to subjugate itself to the obedience of the faith, which it can and ought to do, in virtue of some of its most incontestable maxims. Thus also in renouncing some of its other maxims it acts nevertheless in

accordance with that which it is, that is to say, in reason.' But one must know 'that such maxims of reason as must be renounced in this case are only those which make us judge by appearances or according to the ordinary course of things.' This reason enjoins upon us even in philosophical subjects, when there are invincible proofs to the contrary. It is thus that, being made confident by demonstrations of the goodness and the justice of God, we disregard the appearances of harshness and injustice which we see in this small portion of his Kingdom that is exposed to our gaze. Hitherto we have been illumined by the *light of Nature* and by that of *grace*, but not yet by that of *glory*. Here on earth we see apparent injustice, and we believe and even know the truth of the hidden justice of God; but we shall see that justice when at last the Sun of Justice shall show himself as he is.

83. It is certain that M. Bayle can only be understood as meaning those ostensible maxims which must give way before the eternal verities; for he acknowledges that reason is not in reality contrary to faith. In these posthumous Dialogues he complains (, against M. Jacquelot) of being accused of the belief that our Mysteries are in reality against reason, and (, against M. le Clerc) of the assertion made that he who acknowledges that a doctrine is exposed to irrefutable objections acknowledges also by a necessary consequence the falsity of this doctrine. Nevertheless one would be justified in the assertion if the irrefutability were more than an outward appearance.

84. It may be, therefore, that having long contended thus against M. Bayle on the matter of the use of reason I shall find after all that his opinions were not fundamentally so remote from mine as his expressions, which have provided matter for our considerations, have led one to believe. It is true that frequently he appears to deny absolutely that one can ever answer the objections of reason against faith, and that he asserts the

necessity of comprehending, in order to achieve such an end, how the Mystery comes to be or exists. Yet there are passages where he becomes milder, and contents himself with saying that the answers to these objections are unknown to him. Here is a very precise passage, taken from the excursus on the Manichaeans, which is found at the end of the second edition of his *Dictionary*: 'For the greater satisfaction of the most punctilious readers, I desire to declare here' (he says,) 'that wherever the statement is to be met with in my *Dictionary* that such and such arguments are irrefutable I do not wish it to be taken that they are so in actuality. I mean naught else than that they appear to me irrefutable. That is of no consequence: each one will be able to imagine, if he pleases, that if I deem thus of a matter it is owing to my lack of acumen.' I do not imagine such a thing; his great acumen is too well known to me: but I think that, after having applied his whole mind to magnifying the objections, he had not enough attention left over for the purpose of answering them.

85. M. Bayle confesses, moreover, in his posthumous work against M. le Clerc, that the objections against faith have not the force of proofs. It is therefore *ad hominem* only, or rather *ad homines*, that is, in relation to the existing state of the human race, that he deems these objections irrefutable and the subject unexplainable. There is even a passage where he implies that he despairs not of the possibility that the answer or the explanation may be found, and even in our time. For here is what he says in his posthumous Reply to M. le Clerc (): 'M. Bayle dared to hope that his toil would put on their mettle some of those great men of genius who create new systems, and that they could discover a solution hitherto unknown.' It seems that by this 'solution' he means such an explanation of Mystery as would penetrate to the *how*: but that is not necessary for replying to the objections.

86. Many have undertaken to render this *how* comprehensible, and to prove the possibility of Mysteries. A certain writer named Thomas Bonartes

Nordtanus Anglus, in his *Concordia Scientiae cum Fide,* claimed to do so. This work seemed to me ingenious and learned, but crabbed and involved, and it even contains indefensible opinions. I learned from the *Apologia Cyriacorum* of the Dominican Father Vincent Baron that that book was censured in Rome, that the author was a Jesuit, and that he suffered for having published it. The Reverend Father des Bosses, who now teaches Theology in the Jesuit College of Hildesheim, and who has combined rare erudition with great acumen, which he displays in philosophy and theology, has informed me that the real name of Bonartes was Thomas Barton, and that after leaving the Society he retired to Ireland, where the manner of his death brought about a favourable verdict on his last opinions. I pity the men of talent who bring trouble upon themselves by their toil and their zeal. Something of like nature happened in time past to Pierre Abelard, to Gilbert de la Porree, to John Wyclif, and in our day to the Englishman Thomas Albius, as well as to some others who plunged too far into the explanation of the Mysteries.

87. St. Augustine, however (as well as M. Bayle), does not despair of the possibility that the desired solution may be found upon earth; but this Father believes it to be reserved for some holy man illumined by a peculiar grace: ‘Est aliqua causa fortassis occultior, quae melioribus sanctioribusque reservatur, illius gratia potius quam meritis illorum’ (in *De Genesi ad Literam*, lib. 11, c. 4). Luther reserves the knowledge of the Mystery of Election for the academy of heaven (lib. *De Servo Arbitrio*, c. 174): ‘Illic [Deus] gratiam et misericordiam spargit in indignos, his iram et severitatem spargit in immeritos; utrobique nimius et iniquus apud homines, sed justus et verax apud se ipsum. Nam quomodo hoc justum sit ut indignos coronet, incomprehensibile est modo, videbimus autem, cum illuc venerimus, ubi jam non credetur, sed revelata facie videbitur. Ita quomodo hoc justum sit, ut immeritos damnet, incomprehensibile est modo, creditur tamen, donec

revelabitur filius hominis.' It is to be hoped that M. Bayle now finds himself surrounded by that light which is lacking to us here below, since there is reason to suppose that he was not lacking in good will.

VIRGIL

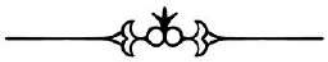
Candidus insueti miratur limen Olympi,
Sub pedibusque videt nubes et sidera Daphnis.

LUCAN

...Illic postquam se lumine vero
Implevit, stellasque vagas miratur et astra
Fixa polis, vidit quanta sub nocte jaceret
Nostra dies.

ESSAYS ON THE JUSTICE OF GOD AND THE FREEDOM OF MAN IN THE ORIGIN OF EVIL

PART ONE



1. HAVING SO settled the rights of faith and of reason as rather to place reason at the service of faith than in opposition to it, we shall see how they exercise these rights to support and harmonize what the light of nature and the light of revelation teach us of God and of man in relation to evil. The *difficulties* are distinguishable into two classes. The one kind springs from man's freedom, which appears incompatible with the divine nature; and nevertheless freedom is deemed necessary, in order that man may be deemed guilty and open to punishment. The other kind concerns the conduct of God, and seems to make him participate too much in the existence of evil, even though man be free and participate also therein. And this conduct appears contrary to the goodness, the holiness and the justice of God, since God co-operates in evil as well physical as moral, and co-operates in each of them both morally and physically; and since it seems that these evils are manifested in the order of nature as well as in that of grace, and in the future and eternal life as well as, nay, more than, in this transitory life.

2. To present these difficulties in brief, it must be observed that freedom is opposed, to all appearance, by determination or certainty of any kind whatever; and nevertheless the common dogma of our philosophers states that the truth of contingent futurities is determined. The foreknowledge of God renders all the future certain and determined, but his providence and his foreordinance, whereon foreknowledge itself appears founded, do much more: for God is not as a man, able to look upon events with unconcern and to suspend his judgement, since nothing exists save as a result of the decrees of his will and through the action of his power. And even though one leave out of account the co-operation of God, all is perfectly connected

in the order of things, since nothing can come to pass unless there be a cause so disposed as to produce the effect, this taking place no less in voluntary than in all other actions. According to which it appears that man is compelled to do the good and evil that he does, and in consequence that he deserves therefor neither recompense nor chastisement: thus is the morality of actions destroyed and all justice, divine and human, shaken.

3. But even though one should grant to man this freedom wherewith he arrays himself to his own hurt, the conduct of God could not but provide matter for a criticism supported by the presumptuous ignorance of men, who would wish to exculpate themselves wholly or in part at the expense of God. It is objected that all the reality and what is termed the substance of the act in sin itself is a production of God, since all creatures and all their actions derive from him that reality they have. Whence one could infer not only that he is the physical cause of sin, but also that he is its moral cause, since he acts with perfect freedom and does nothing without a complete knowledge of the thing and the consequences that it may have. Nor is it enough to say that God has made for himself a law to co-operate with the wills or resolutions of man, whether we express ourselves in terms of the common opinion or in terms of the system of occasional causes. Not only will it be found strange that he should have made such a law for himself, of whose results he was not ignorant, but the principal difficulty is that it seems the evil will itself cannot exist without co-operation, and even without some predetermination, on his part, which contributes towards begetting this will in man or in some other rational creature. For an action is not, for being evil, the less dependent on God. Whence one will come at last to the conclusion that God does all, the good and the evil, indifferently; unless one pretend with the Manichaeans that there are two principles, the one good and the other evil. Moreover, according to the general opinion of theologians and philosophers, conservation being a perpetual creation, it

will be said that man is perpetually created corrupt and erring. There are, furthermore, modern Cartesians who claim that God is the sole agent, of whom created beings are only the purely passive organs; and M. Bayle builds not a little upon that idea.

4. But even granting that God should co-operate in actions only with a general co-operation, or even not at all, at least in those that are bad, it suffices, so it is said, to inculpate him and to render him the moral cause that nothing comes to pass without his permission. To say nothing of the fall of the angels, he knows all that which will come to pass, if, having created man, he places him in such and such circumstances; and he places him there notwithstanding. Man is exposed to a temptation to which it is known that he will succumb, thereby causing an infinitude of frightful evils, by which the whole human race will be infected and brought as it were into a necessity of sinning, a state which is named ‘original sin’. Thus the world will be brought into a strange confusion, by this means death and diseases being introduced, with a thousand other misfortunes and miseries that in general afflict the good and the bad; wickedness will even hold sway and virtue will be oppressed on earth, so that it will scarce appear that a providence governs affairs. But it is much worse when one considers the life to come, since but a small number of men will be saved and since all the rest will perish eternally. Furthermore these men destined for salvation will have been withdrawn from the corrupt mass through an unreasoning election, whether it be said that God in choosing them has had regard to their future actions, to their faith or to their works, or one claim that he has been pleased to give them these good qualities and these actions because he has predestined them to salvation. For though it be said in the most lenient system that God wished to save all men, and though in the other systems commonly accepted it be granted, that he has made his Son take human nature upon him to expiate their sins, so that all they who shall believe in

him with a lively and final faith shall be saved, it still remains true that this lively faith is a gift of God; that we are dead to all good works; that even our will itself must be aroused by a prevenient grace, and that God gives us the power to will and to do. And whether that be done through a grace efficacious of itself, that is to say, through a divine inward motion which wholly determines our will to the good that it does; or whether there be only a sufficient grace, but such as does not fail to attain its end, and to become efficacious in the inward and outward circumstances wherein the man is and has been placed by God: one must return to the same conclusion that God is the final reason of salvation, of grace, of faith and of election in Jesus Christ. And be the election the cause or the result of God's design to give faith, it still remains true that he gives faith or salvation to whom he pleases, without any discernible reason for his choice, which falls upon but few men.

5. So it is a terrible judgement that God, giving his only Son for the whole human race and being the sole author and master of the salvation of men, yet saves so few of them and abandons all others to the devil his enemy, who torments them eternally and makes them curse their Creator, though they have all been created to diffuse and show forth his goodness, his justice and his other perfections. And this outcome inspires all the more horror, as the sole cause why all these men are wretched to all eternity is God's having exposed their parents to a temptation that he knew they would not resist; as this sin is inherent and imputed to men before their will has participated in it; as this hereditary vice impels their will to commit actual sins; and as countless men, in childhood or maturity, that have never heard or have not heard enough of Jesus Christ, Saviour of the human race, die before receiving the necessary succour for their withdrawal from this abyss of sin. These men too are condemned to be for ever rebellious against God and plunged in the most horrible miseries, with the wickedest of all

creatures, though in essence they have not been more wicked than others, and several among them have perchance been less guilty than some of that little number of elect, who were saved by a grace without reason, and who thereby enjoy an eternal felicity which they had not deserved. Such in brief are the difficulties touched upon by sundry persons; but M. Bayle was one who insisted on them the most, as will appear subsequently when we examine his passages. I think that now I have recorded the main essence of these difficulties: but I have deemed it fitting to refrain from some expressions and exaggerations which might have caused offence, while not rendering the objections any stronger.

6. Let us now turn the medal and let us also point out what can be said in answer to those objections; and here a course of explanation through fuller dissertation will be necessary: for many difficulties can be opened up in few words, but for their discussion one must dilate upon them. Our end is to banish from men the false ideas that represent God to them as an absolute prince employing a despotic power, unfitted to be loved and unworthy of being loved. These notions are the more evil in relation to God inasmuch as the essence of piety is not only to fear him but also to love him above all things: and that cannot come about unless there be knowledge of his perfections capable of arousing the love which he deserves, and which makes the felicity of those that love him. Feeling ourselves animated by a zeal such as cannot fail to please him, we have cause to hope that he will enlighten us, and that he will himself aid us in the execution of a project undertaken for his glory and for the good of men. A cause so good gives confidence: if there are plausible appearances against us there are proofs on our side, and I would dare to say to an adversary:

Aspice, quam mage sit nostrum penetrabile telum.

7. *God is the first reason of things*: for such things as are bounded, as all that which we see and experience, are contingent and have nothing in them

to render their existence necessary, it being plain that time, space and matter, united and uniform in themselves and indifferent to everything, might have received entirely other motions and shapes, and in another order. Therefore one must seek the reason for the existence of the world, which is the whole assemblage of *contingent* things, and seek it in the substance which carries with it the reason for its existence, and which in consequence is *necessary* and eternal. Moreover, this cause must be intelligent: for this existing world being contingent and an infinity of other worlds being equally possible, and holding, so to say, equal claim to existence with it, the cause of the world must needs have had regard or reference to all these possible worlds in order to fix upon one of them. This regard or relation of an existent substance to simple possibilities can be nothing other than the *understanding* which has the ideas of them, while to fix upon one of them can be nothing other than the act of the *will* which chooses. It is the *power* of this substance that renders its will efficacious. Power relates to *being*, wisdom or understanding to *truth*, and will to *good*. And this intelligent cause ought to be infinite in all ways, and absolutely perfect in *power*, in *wisdom* and in *goodness*, since it relates to all that which is possible. Furthermore, since all is connected together, there is no ground for admitting more than *one*. Its understanding is the source of *essences*, and its will is the origin of *existences*. There in few words is the proof of one only God with his perfections, and through him of the origin of things.

8. Now this supreme wisdom, united to a goodness that is no less infinite, cannot but have chosen the best. For as a lesser evil is a kind of good, even so a lesser good is a kind of evil if it stands in the way of a greater good; and there would be something to correct in the actions of God if it were possible to do better. As in mathematics, when there is no maximum nor minimum, in short nothing distinguished, everything is done

equally, or when that is not possible nothing at all is done: so it may be said likewise in respect of perfect wisdom, which is no less orderly than mathematics, that if there were not the best (*optimum*) among all possible worlds, God would not have produced any. I call 'World' the whole succession and the whole agglomeration of all existent things, lest it be said that several worlds could have existed in different times and different places. For they must needs be reckoned all together as one world or, if you will, as one Universe. And even though one should fill all times and all places, it still remains true that one might have filled them in innumerable ways, and that there is an infinitude of possible worlds among which God must needs have chosen the best, since he does nothing without acting in accordance with supreme reason.

9. Some adversary not being able to answer this argument will perchance answer the conclusion by a counter-argument, saying that the world could have been without sin and without sufferings; but I deny that then it would have been *better*. For it must be known that all things are *connected* in each one of the possible worlds: the universe, whatever it may be, is all of one piece, like an ocean: the least movement extends its effect there to any distance whatsoever, even though this effect become less perceptible in proportion to the distance. Therein God has ordered all things beforehand once for all, having foreseen prayers, good and bad actions, and all the rest; and each thing *as an idea* has contributed, before its existence, to the resolution that has been made upon the existence of all things; so that nothing can be changed in the universe (any more than in a number) save its essence or, if you will, save its *numerical individuality*. Thus, if the smallest evil that comes to pass in the world were missing in it, it would no longer be this world; which, with nothing omitted and all allowance made, was found the best by the Creator who chose it.

10. It is true that one may imagine possible worlds without sin and without unhappiness, and one could make some like Utopian or Sevarambian romances: but these same worlds again would be very inferior to ours in goodness. I cannot show you this in detail. For can I know and can I present infinities to you and compare them together? But you must judge with me *ab effectu*, since God has chosen this world as it is. We know, moreover, that often an evil brings forth a good whereto one would not have attained without that evil. Often indeed two evils have made one great good:

Et si fata volunt, bina venena juvant.

Even so two liquids sometimes produce a solid, witness the spirit of wine and spirit of urine mixed by Van Helmont; or so do two cold and dark bodies produce a great fire, witness an acid solution and an aromatic oil combined by Herr Hoffmann. A general makes sometimes a fortunate mistake which brings about the winning of a great battle; and do they not sing on the eve of Easter, in the churches of the Roman rite:

O certe necessarium Adae peccatum, quod Christi morte deletum est!

O felix culpa, quae talem ac tantum meruit habere Redemptorem!

11. The illustrious prelates of the Gallican church who wrote to Pope Innocent XII against Cardinal Sfondrati's book on predestination, being of the principles of St. Augustine, have said things well fitted to elucidate this great point. The cardinal appears to prefer even to the Kingdom of Heaven the state of children dying without baptism, because sin is the greatest of evils, and they have died innocent of all actual sin. More will be said of that below. The prelates have observed that this opinion is ill founded. The apostle, they say (Rom. iii. 8), is right to disapprove of the doing of evil that good may come, but one cannot disapprove that God, through his exceeding power, derive from the permitting of sins greater goods than such as occurred before the sins. It is not that we ought to take pleasure in sin, God

forbid! but that we believe the same apostle when he says (Rom. v. 20) that where sin abounded, grace did much more abound; and we remember that we have gained Jesus Christ himself by reason of sin. Thus we see that the opinion of these prelates tends to maintain that a sequence of things where sin enters in may have been and has been, in effect, better than another sequence without sin.

12. Use has ever been made of comparisons taken from the pleasures of the senses when these are mingled with that which borders on pain, to prove that there is something of like nature in intellectual pleasures. A little acid, sharpness or bitterness is often more pleasing than sugar; shadows enhance colours; and even a dissonance in the right place gives relief to harmony. We wish to be terrified by rope-dancers on the point of falling and we wish that tragedies shall well-nigh cause us to weep. Do men relish health enough, or thank God enough for it, without having ever been sick? And is it not most often necessary that a little evil render the good more discernible, that is to say, greater?

13. But it will be said that evils are great and many in number in comparison with the good: that is erroneous. It is only want of attention that diminishes our good, and this attention must be given to us through some admixture of evils. If we were usually sick and seldom in good health, we should be wonderfully sensible of that great good and we should be less sensible of our evils. But is it not better, notwithstanding, that health should be usual and sickness the exception? Let us then by our reflexion supply what is lacking in our perception, in order to make the good of health more discernible. Had we not the knowledge of the life to come, I believe there would be few persons who, being at the point of death, were not content to take up life again, on condition of passing through the same amount of good and evil, provided always that it were not the same kind: one would be

content with variety, without requiring a better condition than that wherein one had been.

14. When one considers also the fragility of the human body, one looks in wonder at the wisdom and the goodness of the Author of Nature, who has made the body so enduring and its condition so tolerable. That has often made me say that I am not astonished men are sometimes sick, but that I am astonished they are sick so little and not always. This also ought to make us the more esteem the divine contrivance of the mechanism of animals, whose Author has made machines so fragile and so subject to corruption and yet so capable of maintaining themselves: for it is Nature which cures us rather than medicine. Now this very fragility is a consequence of the nature of things, unless we are to will that this kind of creature, reasoning and clothed in flesh and bones, be not in the world. But that, to all appearance, would be a defect which some philosophers of old would have called *vacuum formarum*, a gap in the order of species.

15. Those whose humour it is to be well satisfied with Nature and with fortune and not to complain about them, even though they should not be the best endowed, appear to me preferable to the other sort; for besides that these complaints are ill founded, it is in effect murmuring against the orders of providence. One must not readily be among the malcontents in the State where one is, and one must not be so at all in the city of God, wherein one can only wrongfully be of their number. The books of human misery, such as that of Pope Innocent III, to me seem not of the most serviceable: evils are doubled by being given an attention that ought to be averted from them, to be turned towards the good which by far preponderates. Even less do I approve books such as that of Abbé Esprit, *On the Falsity of Human Virtues*, of which we have lately been given a summary: for such a book serves to turn everything wrong side out, and cause men to be such as it represents them.

16. It must be confessed, however, that there are disorders in this life, which appear especially in the prosperity of sundry evil men and in the misfortune of many good people. There is a German proverb which even grants the advantage to the evil ones, as if they were commonly the most fortunate:

Je krümmer Holz, je bessre Krücke:

Je ärger Schalck, je grösser Glücke.

And it were to be desired that this saying of Horace should be true in our eyes:

Raro antecedentem scelestum

Deseruit pede poena claudo.

Yet it often comes to pass also, though this perchance not the most often,

That in the world's eyes Heaven is justified,

and that one may say with Claudian:

Abstulit hunc tandem Rufini poena tumultum,

Absolvitque deos...

17. But even though that should not happen here, the remedy is all prepared in the other life: religion and reason itself teach us that, and we must not murmur against a respite which the supreme wisdom has thought fit to grant to men for repentance. Yet there objections multiply on another side, when one considers salvation and damnation: for it appears strange that, even in the great future of eternity, evil should have the advantage over good, under the supreme authority of him who is the sovereign good, since there will be many that are called and few that are chosen or are saved. It is true that one sees from some lines of Prudentius (Hymn. ante Somnum),

Idem tamen benignus

Ultor retundit iram,

Paucosque non piorum

Patitur perire in aevum,

that divers men believed in his time that the number of those wicked enough to be damned would be very small. To some indeed it seems that men believed at that time in a sphere between Hell and Paradise; that this same Prudentius speaks as if he were satisfied with this sphere; that St. Gregory of Nyssa also inclines in that direction, and that St. Jerome leans towards the opinion according whereunto all Christians would finally be taken into grace. A saying of St. Paul which he himself gives out as mysterious, stating that all Israel will be saved, has provided much food for reflexion. Sundry pious persons, learned also, but daring, have revived the opinion of Origen, who maintains that good will predominate in due time, in all and everywhere, and that all rational creatures, even the bad angels, will become at last holy and blessed. The book of the eternal Gospel, published lately in German and supported by a great and learned work entitled ‘Αποκαταστασις παντων, has caused much stir over this great paradox. M. le Clerc also has ingeniously pleaded the cause of the Origenists, but without declaring himself for them.

18. There is a man of wit who, pushing my principle of harmony even to arbitrary suppositions that I in no wise approve, has created for himself a theology well-nigh astronomical. He believes that the present confusion in this world below began when the Presiding Angel of the globe of the earth, which was still a sun (that is, a star that was fixed and luminous of itself) committed a sin with some lesser angels of his department, perhaps rising inopportunely against an angel of a greater sun; that simultaneously, by the Pre-established Harmony of the Realms of Nature and of Grace, and consequently by natural causes occurring at the appointed time, our globe was covered with stains, rendered opaque and driven from its place; which has made it become a wandering star or planet, that is, a Satellite of another

sun, and even perhaps of that one whose superiority its angel refused to recognize; and that therein consists the fall of Lucifer. Now the chief of the bad angels, who in Holy Scripture is named the prince, and even the god of this world, being, with the angels of his train, envious of that rational animal which walks on the surface of this globe, and which God has set up there perhaps to compensate himself for their fall, strives to render it accessary in their crimes and a participator in their misfortunes. Whereupon Jesus Christ came to save men. He is the eternal Son of God, even as he is his only Son; but (according to some ancient Christians, and according to the author of this hypothesis) having taken upon him at first, from the beginning of things, the most excellent nature among created beings, to bring them all to perfection, he set himself amongst them: and this is the second filiation, whereby he is the first-born of all creatures. This is he whom the Cabalists called Adam Kadmon. Haply he had planted his tabernacle in that great sun which illumines us; but he came at last into this globe where we are, he was born of the Virgin, and took human nature upon him to save mankind from the hands of their enemy and his. And when the time of judgement shall draw near, when the present face of our globe shall be about to perish, he will return to it in visible form, thence to withdraw the good, transplanting them, it may be, into the sun, and to punish here the wicked with the demons that have allured them; then the globe of the earth will begin to burn and will be perhaps a comet. This fire will last for aeons upon aeons. The tail of the comet is intended by the smoke which will rise incessantly, according to the Apocalypse, and this fire will be hell, or the second death whereof Holy Scripture speaks. But at last hell will render up its dead, death itself will be destroyed; reason and peace will begin to hold sway again in the spirits that had been perverted; they will be sensible of their error, they will adore their Creator, and will even begin to love him all the more for seeing the greatness of the abyss whence they emerge.

Simultaneously (by virtue of the *harmonic parallelism* of the Realms of Nature and of Grace) this long and great conflagration will have purged the earth's globe of its stains. It will become again a sun; its Presiding Angel will resume his place with the angels of his train; humans that were damned shall be with them numbered amongst the good angels; this chief of our globe shall render homage to the Messiah, chief of created beings. The glory of this angel reconciled shall be greater than it was before his fall.

Inque Deos iterum factorum lege receptus
Aureus aeternum noster regnabit Apollo.

The vision seemed to me pleasing, and worthy of a follower of Origen: but we have no need of such hypothesis or fictions, where Wit plays a greater part than Revelation, and which even Reason cannot turn to account. For it does not appear that there is one principal place in the known universe deserving in preference to the rest to be the seat of the eldest of created beings; and the sun of our system at least is not it.

19. Holding then to the established doctrine that the number of men damned eternally will be incomparably greater than that of the saved, we must say that the evil could not but seem to be almost as nothing in comparison with the good, when one contemplates the true vastness of the city of God. Coelius Secundus Curio wrote a little book, *De Amplitudine Regni Coelestis*, which was reprinted not long since; but he is indeed far from having apprehended the compass of the kingdom of heaven. The ancients had puny ideas on the works of God, and St. Augustine, for want of knowing modern discoveries, was at a loss when there was question of explaining the prevalence of evil. It seemed to the ancients that there was only one earth inhabited, and even of that men held the antipodes in dread: the remainder of the world was, according to them, a few shining globes and a few crystalline spheres. To-day, whatever bounds are given or not given to the universe, it must be acknowledged that there is an infinite

number of globes, as great as and greater than ours, which have as much right as it to hold rational inhabitants, though it follows not at all that they are human. It is only one planet, that is to say one of the six principal satellites of our sun; and as all fixed stars are suns also, we see how small a thing our earth is in relation to visible things, since it is only an appendix of one amongst them. It may be that all suns are peopled only by blessed creatures, and nothing constrains us to think that many are damned, for few instances or few samples suffice to show the advantage which good extracts from evil. Moreover, since there is no reason for the belief that there are stars everywhere, is it not possible that there may be a great space beyond the region of the stars? Whether it be the Empyrean Heaven, or not, this immense space encircling all this region may in any case be filled with happiness and glory. It can be imagined as like the Ocean, whither flow the rivers of all blessed creatures, when they shall have reached their perfection in the system of the stars. What will become of the consideration of our globe and its inhabitants? Will it not be something incomparably less than a physical point, since our earth is as a point in comparison with the distance of some fixed stars? Thus since the proportion of that part of the universe which we know is almost lost in nothingness compared with that which is unknown, and which we yet have cause to assume, and since all the evils that may be raised in objection before us are in this near nothingness, haply it may be that all evils are almost nothingness in comparison with the good things which are in the universe.

20. But it is necessary also to meet the more speculative and metaphysical difficulties which have been mentioned, and which concern the cause of evil. The question is asked first of all, whence does evil come? *Si Deus est, unde malum? Si non est, unde bonum?* The ancients attributed the cause of evil to *matter*, which they believed uncreate and independent of God: but we, who derive all being from God, where shall we find the source

of evil? The answer is, that it must be sought in the ideal nature of the creature, in so far as this nature is contained in the eternal verities which are in the understanding of God, independently of his will. For we must consider that there is an *original imperfection in the creature* before sin, because the creature is limited in its essence; whence ensues that it cannot know all, and that it can deceive itself and commit other errors. Plato said in *Timaeus* that the world originated in Understanding united to Necessity. Others have united God and Nature. This can be given a reasonable meaning. God will be the Understanding; and the Necessity, that is, the essential nature of things, will be the object of the understanding, in so far as this object consists in the eternal verities. But this object is inward and abides in the divine understanding. And therein is found not only the primitive form of good, but also the origin of evil: the Region of the Eternal Verities must be substituted for matter when we are concerned with seeking out the source of things.

This region is the ideal cause of evil (as it were) as well as of good: but, properly speaking, the formal character of evil has no *efficient* cause, for it consists in privation, as we shall see, namely, in that which the efficient cause does not bring about. That is why the Schoolmen are wont to call the cause of evil *deficient*.

21. Evil may be taken metaphysically, physically and morally. *Metaphysical evil* consists in mere imperfection, *physical evil* in suffering, and *moral evil* in sin. Now although physical evil and moral evil be not necessary, it is enough that by virtue of the eternal verities they be possible. And as this vast Region of Verities contains all possibilities it is necessary that there be an infinitude of possible worlds, that evil enter into divers of them, and that even the best of all contain a measure thereof. Thus has God been induced to permit evil.

22. But someone will say to me: why speak you to us of ‘permitting’? Is it not God that doeth the evil and that willeth it? Here it will be necessary to explain what ‘permission’ is, so that it may be seen how this term is not employed without reason. But before that one must explain the nature of will, which has its own degrees. Taking it in the general sense, one may say that *will* consists in the inclination to do something in proportion to the good it contains. This will is called *antecedent* when it is detached, and considers each good separately in the capacity of a good. In this sense it may be said that God tends to all good, as good, *ad perfectionem simpliciter simplicem*, to speak like the Schoolmen, and that by an antecedent will. He is earnestly disposed to sanctify and to save all men, to exclude sin, and to prevent damnation. It may even be said that this will is efficacious *of itself (per se)*, that is, in such sort that the effect would ensue if there were not some stronger reason to prevent it: for this will does not pass into final exercise (*ad summum conatum*), else it would never fail to produce its full effect, God being the master of all things. Success entire and infallible belongs only to the *consequent will*, as it is called. This it is which is complete; and in regard to it this rule obtains, that one never fails to do what one wills, when one has the power. Now this consequent will, final and decisive, results from the conflict of all the antecedent wills, of those which tend towards good, even as of those which repel evil; and from the concurrence of all these particular wills comes the total will. So in mechanics compound movement results from all the tendencies that concur in one and the same moving body, and satisfies each one equally, in so far as it is possible to do all at one time. It is as if the moving body took equal account of these tendencies, as I once showed in one of the Paris Journals (7 Sept. 1693), when giving the general law of the compositions of movement. In this sense also it may be said that the antecedent will is efficacious in a sense and even effective with success.

23. Thence it follows that God wills *antecedently* the good and *consequently* the best. And as for evil, God wills moral evil not at all, and physical evil or suffering he does not will absolutely. Thus it is that there is no absolute predestination to damnation; and one may say of physical evil, that God wills it often as a penalty owing to guilt, and often also as a means to an end, that is, to prevent greater evils or to obtain greater good. The penalty serves also for amendment and example. Evil often serves to make us savour good the more; sometimes too it contributes to a greater perfection in him who suffers it, as the seed that one sows is subject to a kind of corruption before it can germinate: this is a beautiful similitude, which Jesus Christ himself used.

24. Concerning sin or moral evil, although it happens very often that it may serve as a means of obtaining good or of preventing another evil, it is not this that renders it a sufficient object of the divine will or a legitimate object of a created will. It must only be admitted or *permitted* in so far as it is considered to be a certain consequence of an indispensable duty: as for instance if a man who was determined not to permit another's sin were to fail of his own duty, or as if an officer on guard at an important post were to leave it, especially in time of danger, in order to prevent a quarrel in the town between two soldiers of the garrison who wanted to kill each other.

25. The rule which states, *non esse facienda mala, ut eveniant bona*, and which even forbids the permission of a moral evil with the end of obtaining a physical good, far from being violated, is here proved, and its source and its reason are demonstrated. One will not approve the action of a queen who, under the pretext of saving the State, commits or even permits a crime. The crime is certain and the evil for the State is open to question. Moreover, this manner of giving sanction to crimes, if it were accepted, would be worse than a disruption of some one country, which is liable enough to happen in any case, and would perchance happen all the more by reason of

such means chosen to prevent it. But in relation to God nothing is open to question, nothing can be opposed to *the rule of the best*, which suffers neither exception nor dispensation. It is in this sense that God permits sin: for he would fail in what he owes to himself, in what he owes to his wisdom, his goodness, his perfection, if he followed not the grand result of all his tendencies to good, and if he chose not that which is absolutely the best, notwithstanding the evil of guilt, which is involved therein by the supreme necessity of the eternal verities. Hence the conclusion that God wills all good *in himself antecedently*, that he wills the best *consequently* as an *end*, that he wills what is indifferent, and physical evil, sometimes as a *means*, but that he will only permit moral evil as the *sine quo non* or as a hypothetical necessity which connects it with the best. Therefore the *consequent will* of God, which has sin for its object, is only *permissive*.

26. It is again well to consider that moral evil is an evil so great only because it is a source of physical evils, a source existing in one of the most powerful of creatures, who is also most capable of causing those evils. For an evil will is in its department what the evil principle of the Manichaeans would be in the universe; and reason, which is an image of the Divinity, provides for evil souls great means of causing much evil. One single Caligula, one Nero, has caused more evil than an earthquake. An evil man takes pleasure in causing suffering and destruction, and for that there are only too many opportunities. But God being inclined to produce as much good as possible, and having all the knowledge and all the power necessary for that, it is impossible that in him there be fault, or guilt, or sin; and when he permits sin, it is wisdom, it is virtue.

27. It is indeed beyond question that we must refrain from preventing the sin of others when we cannot prevent their sin without sinning ourselves. But someone will perhaps bring up the objection that it is God himself who acts and who effects all that is real in the sin of the creature. This objection

leads us to consider the *physical co-operation* of God with the creature, after we have examined the *moral co-operation*, which was the more perplexing. Some have believed, with the celebrated Durand de Saint-Pourçain and Cardinal Aureolus, the famous Schoolman, that the co-operation of God with the creature (I mean the physical cooperation) is only general and mediate, and that God creates substances and gives them the force they need; and that thereafter he leaves them to themselves, and does naught but conserve them, without aiding them in their actions. This opinion has been refuted by the greater number of Scholastic theologians, and it appears that in the past it met with disapproval in the writings of Pelagius. Nevertheless a Capuchin named Louis Pereir of Dole, about the year 1630, wrote a book expressly to revive it, at least in relation to free actions. Some moderns incline thereto, and M. Bernier supports it in a little book on freedom and freewill. But one cannot say in relation to God what 'to conserve' is, without reverting to the general opinion. Also it must be taken into account that the action of God in conserving should have some reference to that which is conserved, according to what it is and to the state wherein it is; thus his action cannot be general or indeterminate. These generalities are abstractions not to be found in the truth of individual things, and the conservation of a man standing is different from the conservation of a man seated. This would not be so if conservation consisted only in the act of preventing and warding off some foreign cause which could destroy that which one wishes to conserve; as often happens when men conserve something. But apart from the fact that we are obliged ourselves sometimes to maintain that which we conserve, we must bear in mind that conservation by God consists in the perpetual immediate influence which the dependence of creatures demands. This dependence attaches not only to the substance but also to the action, and one can perhaps not explain it better than by

saying, with theologians and philosophers in general, that it is a continued creation.

28. The objection will be made that God therefore now creates man a sinner, he that in the beginning created him innocent. But here it must be said, with regard to the moral aspect, that God being supremely wise cannot fail to observe certain laws, and to act according to the rules, as well physical as moral, that wisdom has made him choose. And the same reason that has made him create man innocent, but liable to fall, makes him re-create man when he falls; for God's knowledge causes the future to be for him as the present, and prevents him from rescinding the resolutions made.

29. As for physical co-operation, here one must consider the truth which has made already so much stir in the Schools since St. Augustine declared it, that evil is a privation of being, whereas the action of God tends to the positive. This answer is accounted a quibble, and even something chimerical in the minds of many people. But here is an instance somewhat similar, which will serve to disabuse them.

30. The celebrated Kepler and M. Descartes (in his letters) after him have spoken of the 'natural inertia of bodies'; and it is something which may be regarded as a perfect image and even as a sample of the original limitation of creatures, to show that privation constitutes the formal character of the imperfections and disadvantages that are in substance as well as in its actions. Let us suppose that the current of one and the same river carried along with it various boats, which differ among themselves only in the cargo, some being laden with wood, others with stone, and some more, the others less. That being so, it will come about that the boats most heavily laden will go more slowly than the others, provided it be assumed that the wind or the oar, or some other similar means, assist them not at all. It is not, properly speaking, weight which is the cause of this retardation, since the boats are going down and not upwards; but it is the same cause

which also increases the weight in bodies that have greater density, which are, that is to say, less porous and more charged with matter that is proper to them: for the matter which passes through the pores, not receiving the same movement, must not be taken into account. It is therefore matter itself which originally is inclined to slowness or privation of speed; not indeed of itself to lessen this speed, having once received it, since that would be action, but to moderate by its receptivity the effect of the impression when it is to receive it. Consequently, since more matter is moved by the same force of the current when the boat is more laden, it is necessary that it go more slowly; and experiments on the impact of bodies, as well as reason, show that twice as much force must be employed to give equal speed to a body of the same matter but of twice the size. But that indeed would not be necessary if the matter were absolutely indifferent to repose and to movement, and if it had not this natural inertia whereof we have just spoken to give it a kind of repugnance to being moved. Let us now compare the force which the current exercises on boats, and communicates to them, with the action of God, who produces and conserves whatever is positive in creatures, and gives them perfection, being and force: let us compare, I say, the inertia of matter with the natural imperfection of creatures, and the slowness of the laden boat with the defects to be found in the qualities and the action of the creature; and we shall find that there is nothing so just as this comparison. The current is the cause of the boat's movement, but not of its retardation; God is the cause of perfection in the nature and the actions of the creature, but the limitation of the receptivity of the creature is the cause of the defects there are in its action. Thus the Platonists, St. Augustine and the Schoolmen were right to say that God is the cause of the material element of evil which lies in the positive, and not of the formal element, which lies in privation. Even so one may say that the current is the cause of the material element of the retardation, but not of the formal: that is, it is the

cause of the boat's speed without being the cause of the limits to this speed. And God is no more the cause of sin than the river's current is the cause of the retardation of the boat. Force also in relation to matter is as the spirit in relation to the flesh; the spirit is willing and the flesh is weak, and spirits act...

quantum non noxia corpora tardant.

31. There is, then, a wholly similar relation between such and such an action of God, and such and such a passion or reception of the creature, which in the ordinary course of things is perfected only in proportion to its 'receptivity', such is the term used. And when it is said that the creature depends upon God in so far as it exists and in so far as it acts, and even that conservation is a continual creation, this is true in that God gives ever to the creature and produces continually all that in it is positive, good and perfect, every perfect gift coming from the Father of lights. The imperfections, on the other hand, and the defects in operations spring from the original limitation that the creature could not but receive with the first beginning of its being, through the ideal reasons which restrict it. For God could not give the creature all without making of it a God; therefore there must needs be different degrees in the perfection of things, and limitations also of every kind.

32. This consideration will serve also to satisfy some modern philosophers who go so far as to say that God is the only agent. It is true that God is the only one whose action is pure and without admixture of what is termed 'to suffer': but that does not preclude the creature's participation in actions, since *the action of the creature* is a modification of the substance, flowing naturally from it and containing a variation not only in the perfections that God has communicated to the creature, but also in the limitations that the creature, being what it is, brings with it. Thus we see that there is an actual distinction between the substance and its modification

or accidents, contrary to the opinion of some moderns and in particular of the late Duke of Buckingham, who spoke of that in a little *Discourse on Religion* recently reprinted. Evil is therefore like darkness, and not only ignorance but also error and malice consist formally in a certain kind of privation. Here is an example of error which we have already employed. I see a tower which from a distance appears round although it is square. The thought that the tower is what it appears to be flows naturally from that which I see; and when I dwell on this thought it is an affirmation, it is a false judgement; but if I pursue the examination, if some reflexion causes me to perceive that appearances deceive me, lo and behold, I abandon my error. To abide in a certain place, or not to go further, not to espy some landmark, these are privations.

33. It is the same in respect of malice or ill will. The will tends towards good in general, it must strive after the perfection that befits us, and the supreme perfection is in God. All pleasures have within themselves some feeling of perfection. But when one is limited to the pleasures of the senses, or to other pleasures to the detriment of greater good, as of health, of virtue, of union with God, of felicity, it is in this privation of a further aspiration that the defect consists. In general perfection is positive, it is an absolute reality; defect is privative, it comes from limitation and tends towards new privations. This saying is therefore as true as it is ancient: *bonum ex causa integra, malum ex quolibet defectu*; as also that which states: *malum causam habet non efficientem, sed deficientem*. And I hope that the meaning of these axioms will be better apprehended after what I have just said.

34. The physical co-operation of God and of creatures with the will contributes also to the difficulties existing in regard to freedom. I am of opinion that our will is exempt not only from constraint but also from necessity. Aristotle has already observed that there are two things in freedom, to wit, spontaneity and choice, and therein lies our mastery over

our actions. When we act freely we are not being forced, as would happen if we were pushed on to a precipice and thrown from top to bottom; and we are not prevented from having the mind free when we deliberate, as would happen if we were given a draught to deprive us of discernment. There is *contingency* in a thousand actions of Nature; but when there is no judgement in him who acts there is no *freedom*. And if we had judgement not accompanied by any inclination to act, our soul would be an understanding without will.

35. It is not to be imagined, however, that our freedom consists in an indetermination or an indifference of equipoise, as if one must needs be inclined equally to the side of yes and of no and in the direction of different courses, when there are several of them to take. This equipoise in all directions is impossible: for if we were equally inclined towards the courses A, B and C, we could not be equally inclined towards A and towards not A. This equipoise is also absolutely contrary to experience, and in scrutinizing oneself one will find that there has always been some cause or reason inclining us towards the course taken, although very often we be not aware of that which prompts us: just in the same way one is hardly aware why, on issuing from a door, one has placed the right foot before the left or the left before the right.

36. But let us pass to the difficulties. Philosophers agree to-day that the truth of contingent futurities is determinate, that is to say that contingent futurities are future, or that they will be, that they will happen: for it is as sure that the future will be, as it is sure that the past has been. It was true already a hundred years ago that I should write to-day, as it will be true after a hundred years that I have written. Thus the contingent is not, because it is future, any the less contingent; and *determination*, which would be called certainty if it were known, is not incompatible with contingency. Often the certain and the determinate are taken as one thing, because a determinate

truth is capable of being known: thus it may be said that determination is an objective certainty.

37. This determination comes from the very nature of truth, and cannot injure freedom: but there are other determinations taken from elsewhere, and in the first place from the foreknowledge of God, which many have held to be contrary to freedom. They say that what is foreseen cannot fail to exist, and they say so truly; but it follows not that what is foreseen is necessary, for *necessary truth* is that whereof the contrary is impossible or implies contradiction. Now this truth which states that I shall write tomorrow is not of that nature, it is not necessary. Yet supposing that God foresees it, it is necessary that it come to pass; that is, the consequence is necessary, namely, that it exist, since it has been foreseen; for God is infallible. This is what is termed a *hypothetical necessity*. But our concern is not this necessity: it is an *absolute necessity* that is required, to be able to say that an action is necessary, that it is not contingent, that it is not the effect of a free choice. Besides it is very easily seen that foreknowledge in itself adds nothing to the determination of the truth of contingent futurities, save that this determination is known: and this does not augment the determination or the ‘futurition’ (as it is termed) of these events, that whereon we agreed at the outset.

38. This answer is doubtless very correct. It is agreed that foreknowledge in itself does not make truth more determinate; truth is foreseen because it is determinate, because it is true; but it is not true because it is foreseen: and therein the knowledge of the future has nothing that is not also in the knowledge of the past or of the present. But here is what an opponent will be able to say: I grant you that foreknowledge in itself does not make truth more determinate, but it is the cause of the foreknowledge that makes it so. For it needs must be that the foreknowledge of God have its foundation in

the nature of things, and this foundation, making the truth *predeterminate*, will prevent it from being contingent and free.

39. It is this difficulty that has caused two parties to spring up, one of the *predeterminators*, the other of the supporters of *mediate knowledge*. The Dominicans and the Augustinians are for predetermination, the Franciscans and the modern Jesuits on the other hand are for mediate knowledge. These two parties appeared towards the middle of the sixteenth century and a little later. Molina himself, who is perhaps one of the first, with Fonseca, to have systematized this point, and from whom the others derived their name of Molinists, says in the book that he wrote on the reconciliation of freewill with grace, about the year 1570, that the Spanish doctors (he means principally the Thomists), who had been writing then for twenty years, finding no other way to explain how God could have a certain knowledge of contingent futurities, had introduced predetermination as being necessary to free actions.

40. As for himself, he thought to have found another way. He considers that there are three objects of divine knowledge, the possibles, the actual events and the conditional events that would happen in consequence of a certain condition if it were translated into action. The knowledge of possibilities is what is called the ‘knowledge of mere intelligence’; that of events occurring actually in the progress of the universe is called the ‘knowledge of intuition’. And as there is a kind of mean between the merely possible and the pure and absolute event, to wit, the conditional event, it can be said also, according to Molina, that there is a mediate knowledge between that of intuition and that of intelligence. Instance is given of the famous example of David asking the divine oracle whether the inhabitants of the town of Keilah, where he designed to shut himself in, would deliver him to Saul, supposing that Saul should besiege the town. God answered yes; whereupon David took a different course. Now some advocates of this

mediate knowledge are of opinion that God, foreseeing what men would do of their own accord, supposing they were placed in such and such circumstances, and knowing that they would make ill use of their free will, decrees to refuse them grace and favourable circumstances. And he may justly so decree, since in any case these circumstances and these aids would not have served them aught. But Molina contents himself with finding therein generally a reason for the decrees of God, founded on what the free creature would do in such and such circumstances.

41. I will not enter into all the detail of this controversy; it will suffice for me to give one instance. Certain older writers, not acceptable to St. Augustine and his first disciples, appear to have had ideas somewhat approaching those of Molina. The Thomists and those who call themselves disciples of St. Augustine (but whom their opponents call Jansenists) combat this doctrine on philosophical and theological grounds. Some maintain that mediate knowledge must be included in the knowledge of mere intelligence. But the principal objection is aimed at the foundation of this knowledge. For what foundation can God have for seeing what the people of Keilah would do? A simple contingent and free act has nothing in itself to yield a principle of certainty, unless one look upon it as predetermined by the decrees of God, and by the causes that are dependent upon them. Consequently the difficulty existing in actual free actions will exist also in conditional free actions, that is to say, God will know them only under the condition of their causes and of his decrees, which are the first causes of things: and it will not be possible to separate such actions from those causes so as to know a contingent event in a way that is independent of the knowledge of its causes. Therefore all must of necessity be traced back to the predetermination of God's decrees, and this mediate knowledge (so it will be said) will offer no remedy. The theologians who profess to be adherents of St. Augustine claim also that the system of the

Molinists would discover the source of God's grace in the good qualities of man, and this they deem an infringement of God's honour and contrary to St. Paul's teaching.

42. It would be long and wearisome to enter here into the replies and rejoinders coming from one side and the other, and it will suffice for me to explain how I conceive that there is truth on both sides. For this result I resort to my principle of an infinitude of possible worlds, represented in the region of eternal verities, that is, in the object of the divine intelligence, where all conditional futurities must be comprised. For the case of the siege of Keilah forms part of a possible world, *which differs from ours only in all that is connected with this hypothesis*, and the idea of this possible world represents that which would happen in this case. Thus we have a principle for the certain knowledge of contingent futurities, whether they happen actually or must happen in a certain case. For in the region of the possibles they are represented as they are, namely, as free contingencies. Therefore neither the foreknowledge of contingent futurities nor the foundation for the certainty of this foreknowledge should cause us perplexity or seem to prejudice freedom. And though it were true and possible that contingent futurities consisting in free actions of reasonable creatures were entirely independent of the decrees of God and of external causes, there would still be means of foreseeing them; for God would see them as they are in the region of the possibles, before he decrees to admit them into existence.

43. But if the foreknowledge of God has nothing to do with the dependence or independence of our free actions, it is not so with the foreordinance of God, his decrees, and the sequence of causes which, as I believe, always contribute to the determination of the will. And if I am for the Molinists in the first point, I am for the predeterminators in the second, provided always that predetermination be taken as not necessitating. In a word, I am of opinion that the will is always more inclined towards the

course it adopts, but that it is never bound by the necessity to adopt it. That it will adopt this course is certain, but it is not necessary. The case corresponds to that of the famous saying, *Astra inclinant, non necessitant*, although here the similarity is not complete. For the event towards which the stars tend (to speak with the common herd, as if there were some foundation for astrology) does not always come to pass, whereas the course towards which the will is more inclined never fails to be adopted. Moreover the stars would form only a part of the inclinations that co-operate in the event, but when one speaks of the greater inclination of the will, one speaks of the result of all the inclinations. It is almost as we have spoken above of the consequent will in God, which results from all the antecedent wills.

44. Nevertheless, objective certainty or determination does not bring about the necessity of the determinate truth. All philosophers acknowledge this, asserting that the truth of contingent futurities is determinate, and that nevertheless they remain contingent. The thing indeed would imply no contradiction in itself if the effect did not follow; and therein lies contingency. The better to understand this point, we must take into account that there are two great principles of our arguments. The one is the principle of *contradiction*, stating that of two contradictory propositions the one is true, the other false; the other principle is that of the *determinant reason*: it states that nothing ever comes to pass without there being a cause or at least a reason determining it, that is, something to give an *a priori* reason why it is existent rather than non-existent, and in this wise rather than in any other. This great principle holds for all events, and a contrary instance will never be supplied: and although more often than not we are insufficiently acquainted with these determinant reasons, we perceive nevertheless that there are such. Were it not for this great principle we could never prove the existence of God, and we should lose an infinitude of very just and very profitable arguments whereof it is the foundation; moreover, it suffers no

exception, for otherwise its force would be weakened. Besides, nothing is so weak as those systems where all is unsteady and full of exceptions. That fault cannot be laid to the charge of the system I approve, where everything happens in accordance with general rules that at most are mutually restrictive.

45. We must therefore not imagine with some Schoolmen, whose ideas tend towards the chimerical, that free contingent futurities have the privilege of exemption from this general rule of the nature of things. There is always a prevailing reason which prompts the will to its choice, and for the maintenance of freedom for the will it suffices that this reason should incline without necessitating. That is also the opinion of all the ancients, of Plato, of Aristotle, of St. Augustine. The will is never prompted to action save by the representation of the good, which prevails over the opposite representations. This is admitted even in relation to God, the good angels and the souls in bliss: and it is acknowledged that they are none the less free in consequence of that. God fails not to choose the best, but he is not constrained so to do: nay, more, there is no necessity in the object of God's choice, for another sequence of things is equally possible. For that very reason the choice is free and independent of necessity, because it is made between several possibles, and the will is determined only by the preponderating goodness of the object. This is therefore not a defect where God and the saints are concerned: on the contrary, it would be a great defect, or rather a manifest absurdity, were it otherwise, even in men here on earth, and if they were capable of acting without any inclining reason. Of such absurdity no example will ever be found; and even supposing one takes a certain course out of caprice, to demonstrate one's freedom, the pleasure or advantage one thinks to find in this conceit is one of the reasons tending towards it.

46. There is therefore a freedom of contingency or, in a way, of indifference, provided that by ‘indifference’ is understood that nothing necessitates us to one course or the other; but there is never any *indifference of equipoise*, that is, where all is completely even on both sides, without any inclination towards either. Innumerable great and small movements, internal and external, co-operate with us, for the most part unperceived by us. And I have already said that when one leaves a room there are such and such reasons determining us to put the one foot first, without pausing to reflect. For there is not everywhere a slave, as in Trimalchio’s house in Petronius, to cry to us: the right foot first. All that we have just said agrees entirely also with the maxims of the philosophers, who teach that a cause cannot act without having a disposition towards action. It is this disposition which contains a predetermination, whether the doer have received it from without, or have had it in consequence of his own antecedent character.

47. Thus we have no need to resort, in company with some new Thomists, to a new immediate predetermination by God, such as may cause the free creature to abandon his indifference, and to a decree of God for predetermining the creature, making it possible for God to know what the creature will do: for it suffices that the creature be predetermined by its preceding state, which inclines it to one course more than to the other. Moreover, all these connexions of the actions of the creature and of all creatures were represented in the divine understanding, and known to God through the knowledge of mere intelligence, before he had decreed to give them existence. Thus we see that, in order to account for the foreknowledge of God, one may dispense with both the mediate knowledge of the Molinists and the predetermination which a Bañez or an Alvarez (writers otherwise of great profundity) have taught.

48. By this false idea of an indifference of equipoise the Molinists were much embarrassed. They were asked not only how it was possible to know

in what direction a cause absolutely indeterminate would be determined, but also how it was possible that there should finally result therefrom a determination for which there is no source: to say with Molina that it is the privilege of the free cause is to say nothing, but simply to grant that cause the privilege of being chimerical. It is pleasing to see their harassed efforts to emerge from a labyrinth whence there is absolutely no means of egress. Some teach that the will, before it is determined formally, must be determined virtually, in order to emerge from its state of equipoise; and Father Louis of Dole, in his book on the *Co-operation of God*, quotes Molinists who attempt to take refuge in this expedient: for they are compelled to acknowledge that the cause must needs be disposed to act. But they gain nothing, they only defer the difficulty: for they will still be asked how the free cause comes to be determined virtually. They will therefore never extricate themselves without acknowledging that there is a predetermination in the preceding state of the free creature, which inclines it to be determined.

49. In consequence of this, the case also of Buridan's ass between two meadows, impelled equally towards both of them, is a fiction that cannot occur in the universe, in the order of Nature, although M. Bayle be of another opinion. It is true that, if the case were possible, one must say that the ass would starve himself to death: but fundamentally the question deals in the impossible, unless it be that God bring the thing about expressly. For the universe cannot be halved by a plane drawn through the middle of the ass, which is cut vertically through its length, so that all is equal and alike on both sides, in the manner wherein an ellipse, and every plane figure of the number of those I term 'ambidexter', can be thus halved, by any straight line passing through its centre. Neither the parts of the universe nor the viscera of the animal are alike nor are they evenly placed on both sides of this vertical plane. There will therefore always be many things in the ass

and outside the ass, although they be not apparent to us, which will determine him to go on one side rather than the other. And although man is free, and the ass is not, nevertheless for the same reason it must be true that in man likewise the case of a perfect equipoise between two courses is impossible. Furthermore it is true that an angel, or God certainly, could always account for the course man has adopted, by assigning a cause or a predisposing reason which has actually induced him to adopt it: yet this reason would often be complex and incomprehensible to ourselves, because the concatenation of causes linked together is very long.

50. Hence it is that the reason M. Descartes has advanced to prove the independence of our free actions, by what he terms an intense inward sensation, has no force. We cannot properly speaking be sensible of our independence, and we are not aware always of the causes, often imperceptible, whereon our resolution depends. It is as though the magnetic needle took pleasure in turning towards the north: for it would think that it was turning independently of any other cause, not being aware of the imperceptible movements of the magnetic matter. Nevertheless we shall see later in what sense it is quite true that the human soul is altogether its own natural principle in relation to its actions, dependent upon itself and independent of all other creatures.

51. As for *volition* itself, to say that it is an object of free will is incorrect. We will to act, strictly speaking, and we do not will to will; else we could still say that we will to have the will to will, and that would go on to infinity. Besides, we do not always follow the latest judgement of practical understanding when we resolve to will; but we always follow, in our willing, the result of all the inclinations that come from the direction both of reasons and passions, and this often happens without an express judgement of the understanding.

52. All is therefore certain and determined beforehand in man, as everywhere else, and the human soul is a kind of *spiritual automaton*, although contingent actions in general and free action in particular are not on that account necessary with an absolute necessity, which would be truly incompatible with contingency. Thus neither futurition in itself, certain as it is, nor the infallible prevision of God, nor the predetermination either of causes or of God's decrees destroys this contingency and this freedom. That is acknowledged in respect of futurition and prevision, as has already been set forth. Since, moreover, God's decree consists solely in the resolution he forms, after having compared all possible worlds, to choose that one which is the best, and bring it into existence together with all that this world contains, by means of the all-powerful word *Fiat*, it is plain to see that this decree changes nothing in the constitution of things: God leaves them just as they were in the state of mere possibility, that is, changing nothing either in their essence or nature, or even in their accidents, which are represented perfectly already in the idea of this possible world. Thus that which is contingent and free remains no less so under the decrees of God than under his prevision.

53. But could God himself (it will be said) then change nothing in the world? Assuredly he could not now change it, without derogation to his wisdom, since he has foreseen the existence of this world and of what it contains, and since, likewise, he has formed this resolution to bring it into existence: for he cannot be mistaken nor repent, and it did not behove him to from an imperfect resolution applying to one part and not the whole. Thus, all being ordered from the beginning, it is only because of this hypothetical necessity, recognized by everyone, that after God's prevision or after his resolution nothing can be changed: and yet the events in themselves remain contingent. For (setting aside this supposition of the futurition of the thing and of the prevision or of the resolution of God, a

supposition which already lays it down as a fact that the thing will happen, and in accordance with which one must say, 'Unumquodque, quando est, oportet esse, aut unumquodque, siquidem erit, oportet futurum esse'), the event has nothing in it to render it necessary and to suggest that no other thing might have happened in its stead. And as for the connexion between causes and effects, it only inclined, without necessitating, the free agency, as I have just explained; thus it does not produce even a hypothetical necessity, save in conjunction with something from outside, to wit, this very maxim, that the prevailing inclination always triumphs.

54. It will be said also that, if all is ordered, God cannot then perform miracles. But one must bear in mind that the miracles which happen in the world were also enfolded and represented as possible in this same world considered in the state of mere possibility; and God, who has since performed them, when he chose this world had even then decreed to perform them. Again the objection will be made that vows and prayers, merits and demerits, good and bad actions avail nothing, since nothing can be changed. This objection causes most perplexity to people in general, and yet it is purely a sophism. These prayers, these vows, these good or bad actions that occur to-day were already before God when he formed the resolution to order things. Those things which happen in this existing world were represented, with their effects and their consequences, in the idea of this same world, while it was still possible only; they were represented therein, attracting God's grace whether natural or supernatural, requiring punishments or rewards, just as it has happened actually in this world since God chose it. The prayer or the good action were even then an *ideal cause* or *condition*, that is, an inclining reason able to contribute to the grace of God, or to the reward, as it now does in reality. Since, moreover, all is wisely connected together in the world, it is clear that God, foreseeing that which would happen freely, ordered all other things on that basis

beforehand, or (what is the same) he chose that possible world in which everything was ordered in this fashion.

55. This consideration demolishes at the same time what the ancients called the 'Lazy Sophism' (λογος αργος) which ended in a decision to do nothing: for (people would say) if what I ask is to happen it will happen even though I should do nothing; and if it is not to happen it will never happen, no matter what trouble I take to achieve it. This necessity, supposedly existent in events, and detached from their causes, might be termed *Fatum Mahometanum*, as I have already observed above, because a similar line of reasoning, so it is said, causes the Turks not to shun places ravaged by plague. But the answer is quite ready: the effect being certain, the cause that shall produce it is certain also; and if the effect comes about it will be by virtue of a proportionate cause. Thus your laziness perchance will bring it about that you will obtain naught of what you desire, and that you will fall into those misfortunes which you would by acting with care have avoided. We see, therefore, that the *connexion of causes with effects*, far from causing an unendurable fatality, provides rather a means of obviating it. There is a German proverb which says that death will ever have a cause; and nothing is so true. You will die on that day (let us presume it is so, and that God foresees it): yes, without doubt; but it will be because you will do what shall lead you thither. It is likewise with the chastisements of God, which also depend upon their causes. And it will be apposite in this connexion to quote this famous passage from St. Ambrose (in cap. I *Lucae*), 'Novit Dominus mutare sententiam, si tu noveris mutare delictum', which is not to be understood as of reprobation, but of denunciation, such as that which Jonah dealt out for God to the Ninevites. This common saying: 'Si non es praedestinatus, fac ut praedestineris', must not be taken literally, its true sense being that he who has doubts of his predestination need only do what is required for him to obtain it by the

grace of God. The sophism which ends in a decision to trouble oneself over nothing will haply be useful sometimes to induce certain people to face danger fearlessly. It has been applied in particular to Turkish soldiers: but it seems that hashish is a more important factor than this sophism, not to mention the fact that this resolute spirit in the Turks has greatly belied itself in our days.

56. A learned physician of Holland named Johan van Beverwyck took the trouble to write *De Termino Vitae* and to collect sundry answers, letters and discourses of some learned men of his time on this subject. This collection has been printed, and it is astonishing to see there how often people are misled, and how they have confused a problem which, properly speaking, is the easiest in the world. After that it is no wonder that there are very many doubts which the human race cannot abandon. The truth is that people love to lose themselves, and this is a kind of ramble of the mind, which is unwilling to subject itself to attention, to order, to rules. It seems as though we are so accustomed to games and jesting that we play the fool even in the most serious occupations, and when we least think to do so.

57. I fear that in the recent dispute between the theologians of the Augsburg Confession, *De Termino Paenitentiae Peremptorio*, which has called forth so many treatises in Germany, some misunderstanding, though of a different nature, has slipped in. The terms prescribed by the laws are amongst lawyers known as *fatalia*. It may be said, in a sense, that the *peremptory term*, prescribed to man for his repentance and amendment, is certain in the sight of God, with whom all is certain. God knows when a sinner will be so hardened that thereafter nothing can be done for him: not indeed that it would be impossible for him to do penance or that sufficient grace needs must be refused to him after a certain term, a grace that never fails; but because there will be a time whereafter he will no more approach the ways of salvation. But we never have certain marks for recognizing this

term, and we are never justified in considering a man utterly abandoned: that would be to pass a rash judgement. It were better always to have room for hope; and this is an occasion, with a thousand others, where our ignorance is beneficial.

Prudens futuri temporis exitum
Caliginosa nocte premit Deus.

58. The whole future is doubtless determined: but since we know not what it is, nor what is foreseen or resolved, we must do our duty, according to the reason that God has given us and according to the rules that he has prescribed for us; and thereafter we must have a quiet mind, and leave to God himself the care for the outcome. For he will never fail to do that which shall be the best, not only in general but also in particular, for those who have true confidence in him, that is, a confidence composed of true piety, a lively faith and fervent charity, by virtue of which we will, as far as in us lies, neglect nothing appertaining to our duty and his service. It is true that we cannot 'render service' to him, for he has need of nothing: but it is 'serving him', in our parlance, when we strive to carry out his presumptive will, co-operating in the good as it is known to us, wherever we can contribute thereto. For we must always presume that God is prompted towards the good we know, until the event shows us that he had stronger reasons, although perhaps unknown to us, which have made him subordinate this good that we sought to some other greater good of his own designing, which he has not failed or will not fail to effect.

59. I have just shown how the action of the will depends upon its causes; that there is nothing so appropriate to human nature as this dependence of our actions; and that otherwise one would slip into a preposterous and unendurable fatality, namely into the *Fatum Mahometanum*, which is the worst of all because it overthrows foresight and good counsel. It is well to show, notwithstanding, how this dependence of voluntary actions does not

fundamentally preclude the existence within us of a wonderful *spontaneity*, which in a certain sense makes the soul in its resolves independent of the physical influence of all other creatures. This spontaneity, hitherto little recognized, which exalts our command over our actions to the highest pitch, is a consequence of the System of Pre-established Harmony, of which I must give some explanation here. The Scholastic philosophers believed that there was a reciprocal physical influence between body and soul: but since it has been recognized that thought and dimensional mass have no mutual connexion, and that they are creatures differing *toto genere*, many moderns have acknowledged that there is no *physical communication* between soul and body, despite the *metaphysical communication* always subsisting, which causes soul and body to compose one and the same *suppositum*, or what is called a person. This physical communication, if there were such, would cause the soul to change the degree of speed and the directional line of some motions that are in the body, and *vice versa* the body to change the sequence of the thoughts that are in the soul. But this effect cannot be inferred from any notion conceived in the body and in the soul; though nothing be better known to us than the soul, since it is inmost to us, that is to say inmost to itself.

60. M. Descartes wished to compromise and to make a part of the body's action dependent upon the soul. He believed in the existence of a rule of Nature to the effect, according to him, that the same quantity of movement is conserved in bodies. He deemed it not possible that the influence of the soul should violate this law of bodies, but he believed that the soul notwithstanding might have power to change the direction of the movements that are made in the body; much as a rider, though giving no force to the horse he mounts, nevertheless controls it by guiding that force in any direction he pleases. But as that is done by means of the bridle, the

bit, the spurs and other material aids, it is conceivable how that can be; there are, however, no instruments such as the soul may employ for this result, nothing indeed either in the soul or in the body, that is, either in thought or in the mass, which may serve to explain this change of the one by the other. In a word, that the soul should change the quantity of force and that it should change the line of direction, both these things are equally inexplicable.

61. Moreover, two important truths on this subject have been discovered since M. Descartes' day. The first is that the quantity of absolute force which is in fact conserved is different from the quantity of movement, as I have demonstrated elsewhere. The second discovery is that the same direction is still conserved in all bodies together that are assumed as interacting, in whatever way they come into collision. If this rule had been known to M. Descartes, he would have taken the direction of bodies to be as independent of the soul as their force; and I believe that that would have led direct to the Hypothesis of Pre-established Harmony, whither these same rules have led me. For apart from the fact that the physical influence of one of these substances on the other is inexplicable, I recognized that without a complete derangement of the laws of Nature the soul could not act physically upon the body. And I did not believe that one could here listen to philosophers, competent in other respects, who produce a God, as it were, *ex machina*, to bring about the final solution of the piece, maintaining that God exerts himself deliberately to move bodies as the soul pleases, and to give perceptions to the soul as the body requires. For this system, which is called that of *occasional causes* (because it teaches that God acts on the body at the instance of the soul, and *vice versa*), besides introducing perpetual miracles to establish communication between these two substances, does not obviate the derangement of the natural laws obtaining

in each of these same substances, which, in the general opinion, their mutual influence would cause.

62. Being on other considerations already convinced of the principle of Harmony in general, I was in consequence convinced likewise of the *preformation* and the Pre-established Harmony of all things amongst themselves, of that between nature and grace, between the decrees of God and our actions foreseen, between all parts of matter, and even between the future and the past, the whole in conformity with the sovereign wisdom of God, whose works are the most harmonious it is possible to conceive. Thus I could not fail to arrive at the system which declares that God created the soul in the beginning in such a fashion that it must produce and represent to itself successively that which takes place within the body, and the body also in such a fashion that it must do of itself that which the soul ordains. Consequently the laws that connect the thoughts of the soul in the order of final causes and in accordance with the evolution of perceptions must produce pictures that meet and harmonize with the impressions of bodies on our organs; and likewise the laws of movements in the body, which follow one another in the order of efficient causes, meet and so harmonize with the thoughts of the soul that the body is induced to act at the time when the soul wills it.

63. Far from its being prejudicial, nothing can be more favourable to freedom than that system. And M. Jacquelot has demonstrated well in his book on the *Conformity of Faith with Reason*, that it is just as if he who knows all that I shall order a servant to do the whole day long on the morrow made an automaton entirely resembling this servant, to carry out to-morrow at the right moment all that I should order; and yet that would not prevent me from ordering freely all that I should please, although the action of the automaton that would serve me would not be in the least free.

64. Moreover, since all that passes in the soul depends, according to this system, only upon the soul, and its subsequent state is derived only from it and from its present state, how can one give it a greater *independence*? It is true that there still remains some imperfection in the constitution of the soul. All that happens to the soul depends upon it, but depends not always upon its will; that were too much. Nor are such happenings even recognized always by its understanding or perceived with distinctness. For there is in the soul not only an order of distinct perceptions, forming its dominion, but also a series of confused perceptions or passions, forming its bondage: and there is no need for astonishment at that; the soul would be a Divinity if it had none but distinct perceptions. It has nevertheless some power over these confused perceptions also, even if in an indirect manner. For although it cannot change its passions forthwith, it can work from afar towards that end with enough success, and endue itself with new passions and even habits. It even has a like power over the more distinct perceptions, being able to endue itself indirectly with opinions and intentions, and to hinder itself from having this one or that, and stay or hasten its judgement. For we can seek means beforehand to arrest ourselves, when occasion arises, on the sliding step of a rash judgement; we can find some incident to justify postponement of our resolution even at the moment when the matter appears ready to be judged. Although our opinion and our act of willing be not directly objects of our will (as I have already observed), one sometimes, takes measures nevertheless, to will and even to believe in due time, that which one does not will, or believe, now. So great is the profundity of the spirit of man.

65. And now, to bring to a conclusion this question of *spontaneity*, it must be said that, on a rigorous definition, the soul has within it the principle of all its actions, and even of all its passions, and that the same is true in all the simple substances scattered throughout Nature, although there

be freedom only in those that are intelligent. In the popular sense notwithstanding, speaking in accordance with appearances, we must say that the soul depends in some way upon the body and upon the impressions of the senses: much as we speak with Ptolemy and Tycho in everyday converse, and think with Copernicus, when it is a question of the rising and the setting of the sun.

66. One may however give a true and philosophic sense to this *mutual dependence* which we suppose between the soul and the body. It is that the one of these two substances depends upon the other ideally, in so far as the reason of that which is done in the one can be furnished by that which is in the other. This had already happened when God ordered beforehand the harmony that there would be between them. Even so would that automaton, that should fulfil the servant's function, depend upon me *ideally*, in virtue of the knowledge of him who, foreseeing my future orders, would have rendered it capable of serving me at the right moment all through the morrow. The knowledge of my future intentions would have actuated this great craftsman, who would accordingly have fashioned the automaton: my influence would be objective, and his physical. For in so far as the soul has perfection and distinct thoughts, God has accommodated the body to the soul, and has arranged beforehand that the body is impelled to execute its orders. And in so far as the soul is imperfect and as its perceptions are confused, God has accommodated the soul to the body, in such sort that the soul is swayed by the passions arising out of corporeal representations. This produces the same effect and the same appearance as if the one depended immediately upon the other, and by the agency of a physical influence. Properly speaking, it is by its confused thoughts that the soul represents the bodies which encompass it. The same thing must apply to all that we understand by the actions of simple substances one upon another. For each one is assumed to act upon the other in proportion to its perfection, although

this be only ideally, and in the reasons of things, as God in the beginning ordered one substance to accord with another in proportion to the perfection or imperfection that there is in each. (Withal action and passion are always reciprocal in creatures, because one part of the reasons which serve to explain clearly what is done, and which have served to bring it into existence, is in the one of these substances, and another part of these reasons is in the other, perfections and imperfections being always mingled and shared.) Thus it is we attribute *action* to the one, and *passion* to the other.

67. But after all, whatsoever dependence be conceived in voluntary actions, and even though there were an absolute and mathematical necessity (which there is not) it would not follow that there would not be a sufficient degree of freedom to render rewards and punishments just and reasonable. It is true that generally we speak as though the necessity of the action put an end to all merit and all demerit, all justification for praise and blame, for reward and punishment: but it must be admitted that this conclusion is not entirely correct. I am very far from sharing the opinions of Bradwardine, Wyclif, Hobbes and Spinoza, who advocate, so it seems, this entirely mathematical necessity, which I think I have adequately refuted, and perhaps more clearly than is customary. Yet one must always bear testimony to the truth and not impute to a dogma anything that does not result from it. Moreover, these arguments prove too much, since they would prove just as much against hypothetical necessity, and would justify the lazy sophism. For the absolute necessity of the sequence of causes would in this matter add nothing to the infallible certainty of a hypothetical necessity.

68. In the first place, therefore, it must be agreed that it is permitted to kill a madman when one cannot by other means defend oneself. It will be granted also that it is permitted, and often even necessary, to destroy

venomous or very noxious animals, although they be not so by their own fault.

69. Secondly, one inflicts punishments upon a beast, despite its lack of reason and freedom, when one deems that this may serve to correct it: thus one punishes dogs and horses, and indeed with much success. Rewards serve us no less in the managing of animals: when an animal is hungry, the food that is given to him causes him to do what otherwise would never be obtained from him.

70. Thirdly, one would inflict even on beasts capital punishments (where it is no longer a question of correcting the beast that is punished) if this punishment could serve as an example, or inspire terror in others, to make them cease from evil doing. Rorarius, in his book on reason in beasts, says that in Africa they crucified lions, in order to drive away other lions from the towns and frequented places, and that he had observed in passing through the province of Jülich that they hanged wolves there in order to ensure greater safety for the sheepfolds. There are people in the villages also who nail birds of prey to the doors of houses, with the idea that other birds of the same kind will then not so readily appear. These measures would always be justified if they were of any avail.

71. Then, in the fourth place, since experience proves that the fear of chastisements and the hope of rewards serves to make men abstain from evil and strive to do good, one would have good reason to avail oneself of such, even though men were acting under necessity, whatever the necessity might be. The objection will be raised that if good or evil is necessary it is useless to avail oneself of means to obtain it or to hinder it: but the answer has already been given above in the passage combating the lazy sophism. If good or evil were a necessity without these means, then such means would be unavailing; but it is not so. These goods and evils come only with the aid of these means, and if these results were necessary the means would be a

part of the causes rendering them necessary, since experience teaches us that often fear or hope hinders evil or advances good. This objection, then, differs hardly at all from the lazy sophism, which we raise against the certainty as well as the necessity of future events. Thus one may say that these objections are directed equally against hypothetical necessity and absolute necessity, and that they prove as much against the one as against the other, that is to say, nothing at all.

72. There was a great dispute between Bishop Bramhall and Mr. Hobbes, which began when they were both in Paris, and which was continued after their return to England; all the parts of it are to be found collected in a quarto volume published in London in the year 1656. They are all in English, and have not been translated as far as I know, nor inserted in the Collection of Works in Latin by Mr. Hobbes. I had already read these writings, and have obtained them again since. And I had observed at the outset that he had not at all proved the absolute necessity of all things, but had shown sufficiently that necessity would not overthrow all the rules of divine or human justice, and would not prevent altogether the exercise of this virtue.

73. There is, however, a kind of justice and a certain sort of rewards and of punishments which appear not so applicable to those who should act by an absolute necessity, supposing such necessity existed. It is that kind of justice which has for its goal neither improvement nor example, nor even redress of the evil. This justice has its foundation only in the fitness of things, which demands a certain satisfaction for the expiation of an evil action. The Socinians, Hobbes and some others do not admit this punitive justice, which properly speaking is avenging justice. God reserves it for himself in many cases; but he does not fail to grant it to those who are entitled to govern others, and he exercises it through their agency, provided that they act under the influence of reason and not of passion. The Socinians

believe it to be without foundation, but it always has some foundation in that fitness of things which gives satisfaction not only to the injured but also to the wise who see it; even as a beautiful piece of music, or again a good piece of architecture, satisfies cultivated minds. And the wise lawgiver having threatened, and having, so to speak, promised a chastisement, it befits his consistency not to leave the action completely unpunished, even though the punishment would no longer avail to correct anyone. But even though he should have promised nothing, it is enough that there is a fitness of things which could have prompted him to make this promise, since the wise man likewise promises only that which is fitting. And one may even say that there is here a certain compensation of the mind, which would be scandalized by disorder if the chastisement did not contribute towards restoring order. One can also consult what Grotius wrote against the Socinians, of the satisfaction of Jesus Christ, and the answer of Crellius thereto.

74. Thus it is that the pains of the damned continue, even when they no longer serve to turn them away from evil, and that likewise the rewards of the blessed continue, even when they no longer serve for strengthening them in good. One may say nevertheless that the damned ever bring upon themselves new pains through new sins, and that the blessed ever bring upon themselves new joys by new progress in goodness: for both are founded on the *principle of the fitness of things*, which has seen to it that affairs were so ordered that the evil action must bring upon itself a chastisement. There is good reason to believe, following the parallelism of the two realms, that of final causes and that of efficient causes, that God has established in the universe a connexion between punishment or reward and bad or good action, in accordance wherewith the first should always be attracted by the second, and virtue and vice obtain their reward and their punishment in consequence of the natural sequence of things, which

contains still another kind of pre-established harmony than that which appears in the communication between the soul and the body. For, in a word, all that God does, as I have said already, is harmonious to perfection. Perhaps then this principle of the fitness of things would no longer apply to beings acting without true freedom or exemption from absolute necessity; and in that case corrective justice alone would be administered, and not punitive justice. That is the opinion of the famous Conringius, in a dissertation he published on what is just. And indeed, the reasons Pomponazzi employed in his book on fate, to prove the usefulness of chastisements and rewards, even though all should come about in our actions by a fatal necessity, concern only amendment and not satisfaction, κολασιν ου τιμωριαν. Moreover, it is only for the sake of outward appearances that one destroys animals accessary to certain crimes, as one razes the houses of rebels, that is, to inspire terror. Thus it is an act of corrective justice, wherein punitive justice has no part at all.

75. But we will not amuse ourselves now by discussing a question more curious than necessary, since we have shown sufficiently that there is no such necessity in voluntary actions. Nevertheless it was well to show that *imperfect freedom* alone, that is, freedom which is exempt only from constraint, would suffice as foundation for chastisements and rewards of the kind conducive to the avoidance of evil, and to amendment. One sees also from this that some persons of intelligence, who persuade themselves that everything is necessary, are wrong in saying that none must be praised or blamed, rewarded or punished. Apparently they say so only to exercise their wit: the pretext is that all being necessary nothing would be in our power. But this pretext is ill founded: necessary actions would be still in our power, at least in so far as we could perform them or omit them, when the hope or the fear of praise or blame, of pleasure or pain prompted our will thereto, whether they prompted it of necessity, or in prompting it they left

spontaneity, contingency and freedom all alike unimpaired. Thus praise and blame, rewards and punishments would preserve always a large part of their use, even though there were a true necessity in our actions. We can praise and blame also natural good and bad qualities, where the will has no part — in a horse, in a diamond, in a man; and he who said of Cato of Utica that he acted virtuously through the goodness of his nature, and that it was impossible for him to behave otherwise, thought to praise him the more.

76. The difficulties which I have endeavoured up to now to remove have been almost all common to natural and revealed theology. Now it will be necessary to come to a question of revealed theology, concerning the election or the reprobation of men, with the dispensation or use of divine grace in connexion with these acts of the mercy or the justice of God. But when I answered the preceding objections, I opened up a way to meet those that remain. This confirms the observation I made thereon (*Preliminary Dissertation,* 43) that there is rather a conflict between the true reasons of natural theology and the false reasons of human appearances, than between revealed faith and reason. For on this subject scarcely any difficulty arises that is new, and not deriving its origin from those which can be placed in the way of the truths discerned by reason.

77. Now as theologians of all parties are divided among themselves on this subject of predestination and grace, and often give different answers to the same objections, according to their various principles, one cannot avoid touching on the differences which prevail among them. One may say in general that some look upon God more metaphysically and others more morally: and it has already been stated on other occasions that the Counter-Remonstrants took the first course and the Remonstrants the second. But to act rightly we must affirm alike on one side the independence of God and the dependence of creatures, and on the other side the justice and goodness

of God, which makes him dependent upon himself, his will upon his understanding or his wisdom.

78. Some gifted and well-intentioned authors, desiring to show the force of the reasons advocated by the two principal parties, in order to persuade them to a mutual tolerance, deem that the whole controversy is reduced to this essential point, namely: What was God's principal aim in making his decrees with regard to man? Did he make them solely in order to show forth his glory by manifesting his attributes, and forming, to that end, the great plan of creation and providence? Or has he had regard rather to the voluntary movements of intelligent substances which he designed to create, considering what they would will and do in the different circumstances and situations wherein he might place them, so as to form a fitting resolve thereupon? It appears to me that the two answers to this great question thus given as opposites to one another are easy to reconcile, and that in consequence the two parties would be agreed in principle, without any need of tolerance, if all were reduced to this point. In truth God, in designing to create the world, purposed solely to manifest and communicate his perfections in the way that was most efficacious, and most worthy of his greatness, his wisdom and his goodness. But that very purpose pledged him to consider all the actions of creatures while still in the state of pure possibility, that he might form the most fitting plan. He is like a great architect whose aim in view is the satisfaction or the glory of having built a beautiful palace, and who considers all that is to enter into this construction: the form and the materials, the place, the situation, the means, the workmen, the expense, before he forms a complete resolve. For a wise person in laying his plans cannot separate the end from the means; he does not contemplate any end without knowing if there are means of attaining thereto.

79. I know not whether there are also perchance persons who imagine that, God being the absolute master of all things, one can thence infer that everything outside him is indifferent to him, that he considers himself alone, without concern for others, and that thus he has made some happy and others unhappy without any cause, without choice, without reason. But to teach so about God were to deprive him of wisdom and of goodness. We need only observe that he considers himself and neglects nothing of what he owes to himself, to conclude that he considers his creatures also, and that he uses them in the manner most consistent with order. For the more a great and good prince is mindful of his glory, the more he will think of making his subjects happy, even though he were the most absolute of all monarchs, and though his subjects were slaves from birth, bondsmen (in lawyers' parlance), people entirely in subjection to arbitrary power. Calvin himself and some others of the greatest defenders of the absolute decree rightly maintained that God had *great and just reasons* for his election and the dispensation of his grace, although these reasons be unknown to us in detail: and we must judge charitably that the most rigid predestinators have too much reason and too much piety to depart from this opinion.

80. There will therefore be no argument for debate on that point (as I hope) with people who are at all reasonable. But there will always be argument among those who are called Universalists and Particularists, according to what they teach of the grace and the will of God. Yet I am somewhat inclined to believe that the heated dispute between them on the will of God to save all men, and on that which depends upon it (when one keeps separate the doctrine *de Auxiliis*, or of the assistance of grace), rests rather in expressions than in things. For it is sufficient to consider that God, as well as every wise and beneficent mind, is inclined towards all possible good, and that this inclination is proportionate to the excellence of the good. Moreover, this results (if we take the matter precisely and in itself) from an

‘antecedent will’, as it is termed, which, however, is not always followed by its complete effect, because this wise mind must have many other inclinations besides. Thus it is the result of all the inclinations together that makes his will complete and decretory, as I have already explained. One may therefore very well say with ancient writers that God wills to save all men according to his antecedent will, but not according to his consequent will, which never fails to be followed by its effect. And if those who deny this universal will do not allow that the antecedent inclination be called a will, they are only troubling themselves about a question of name.

81. But there is a question more serious in regard to predestination to eternal life and to all other destination by God, to wit, whether this destination is absolute or respective. There is destination to good and destination to evil; and as evil is moral or physical, theologians of all parties agree that there is no destination to moral evil, that is to say, that none is destined to sin. As for the greatest physical evil, which is damnation, one can distinguish between destination and predestination: for predestination appears to contain within itself an absolute destination, which is anterior to the consideration of the good or evil actions of those whom it concerns. Thus one may say that the reprobate are *destined* to be condemned, because they are known to be impenitent. But it cannot so well be said that the reprobate are *predestined* to damnation: for there is no *absolute* reprobation, its foundation being final foreseen impenitence.

82. It is true that there are writers who maintain that God, wishing to manifest his mercy and his justice in accordance with reasons worthy of him, but unknown to us, chose the elect, and in consequence rejected the damned, prior to all thought of sin, even of Adam, that after this resolve he thought fit to permit sin in order to be able to exercise these two virtues, and that he has bestowed grace in Jesus Christ to some in order to save them, while he has refused it to others in order to be able to punish them. Hence

these writers are named ‘Supralapsarians’, because the decree to punish precedes, according to them, the knowledge of the future existence of sin. But the opinion most common to-day amongst those who are called Reformed, and one that is favoured by the Synod of Dordrecht, is that of the ‘Infralapsarians’, corresponding somewhat to the conception of St. Augustine. For he asserts that God having resolved to permit the sin of Adam and the corruption of the human race, for reasons just but hidden, his mercy made him choose some of the corrupt mass to be freely saved by the merit of Jesus Christ, and his justice made him resolve to punish the others by the damnation that they deserved. That is why, with the Schoolmen, only the saved were called *Praedestinati* and the damned were called *Praesciti*. It must be admitted that some Infralapsarians and others speak sometimes of predestination to damnation, following the example of Fulgentius and of St. Augustine himself: but that signifies the same as destination to them, and it avails nothing to wrangle about words. That pretext, notwithstanding, was in time past used for maltreating that Godescalc who caused a stir about the middle of the ninth century, and who took the name of Fulgentius to indicate that he followed that author.

83. As for the destination of the elect to eternal life, the Protestants, as well as those of the Roman Church, dispute much among themselves as to whether election is absolute or is founded on the prevision of final living faith. Those who are called Evangelicals, that is, those of the Augsburg Confession, hold the latter opinion: they believe that one need not go into the hidden causes of election while one may find a manifest cause of it shown in Holy Scripture, which is faith in Jesus Christ; and it appears to them that the prevision of the cause is also the cause of the prevision of the effect. Those who are called Reformed are of a different opinion: they admit that salvation comes from faith in Jesus Christ, but they observe that often the cause anterior to the effect in execution is posterior in intention, as when

the cause is the means and the effect is the end. Thus the question is, whether faith or salvation is anterior in the intention of God, that is, whether God's design is rather to save man than to make him a believer.

84. Hence we see that the question between the Supralapsarians and the Infralapsarians in part, and again between them and the Evangelicals, comes back to a right conception of the order that is in God's decrees. Perhaps one might put an end to this dispute at once by saying that, properly speaking, all the decrees of God that are here concerned are simultaneous, not only in respect of time, as everyone agrees, but also *in signo rationis*, or in the order of nature. And indeed, the Formula of Concord, building upon some passages of St. Augustine, comprised in the same Decree of Election salvation and the means that conduce to it. To demonstrate this synchronism of destinations or of decrees with which we are concerned, we must revert to the expedient that I have employed more than once, which states that God, before decreeing anything, considered among other possible sequences of things that one which he afterwards approved. In the idea of this is represented how the first parents sin and corrupt their posterity; how Jesus Christ redeems the human race; how some, aided by such and such graces, attain to final faith and to salvation; and how others, with or without such or other graces, do not attain thereto, continue in sin, and are damned. God grants his sanction to this sequence only after having entered into all its detail, and thus pronounces nothing final as to those who shall be saved or damned without having pondered upon everything and compared it with other possible sequences. Thus God's pronouncement concerns the whole sequence at the same time; he simply decrees its existence. In order to save other men, or in a different way, he must needs choose an altogether different sequence, seeing that all is connected in each sequence. In this conception of the matter, which is that most worthy of the All-wise, all whose actions are connected together to the highest possible degree, there

would be only one total decree, which is to create such a world. This total decree comprises equally all the particular decrees, without setting one of them before or after another. Yet one may say also that each particular act of antecedent will entering into the total result has its value and order, in proportion to the good whereto this act inclines. But these acts of antecedent will are not called decrees, since they are not yet inevitable, the outcome depending upon the total result. According to this conception of things, all the difficulties that can here be made amount to the same as those I have already stated and removed in my inquiry concerning the origin of evil.

85. There remains only one important matter of discussion, which has its peculiar difficulties. It is that of the dispensation of the means and circumstances contributing to salvation and to damnation. This comprises amongst others the subject of the Aids of Grace (*de auxiliis gratiae*), on which Rome (since the Congregation *de Auxiliis* under Clement VIII, when a debate took place between the Dominicans and the Jesuits) does not readily permit books to be published. Everyone must agree that God is altogether good and just, that his goodness makes him contribute the least possible to that which can render men guilty, and the most possible to that which serves to save them (possible, I say, subject to the general order of things); that his justice prevents him from condemning innocent men, and from leaving good actions without reward; and that he even keeps an exact proportion in punishments and rewards. Nevertheless, this idea that one should have of the goodness and the justice of God does not appear enough in what we know of his actions with regard to the salvation and the damnation of men: and it is that which makes difficulties concerning sin and its remedies.

86. The first difficulty is how the soul could be infected with original sin, which is the root of actual sins, without injustice on God's part in exposing

the soul thereto. This difficulty has given rise to three opinions on the origin of the soul itself. The first is that of the *pre-existence of human souls* in another world or in another life, where they had sinned and on that account had been condemned to this prison of the human body, an opinion of the Platonists which is attributed to Origen and which even to-day finds adherents. Henry More, an English scholar, advocated something like this dogma in a book written with that express purpose. Some of those who affirm this pre-existence have gone as far as metempsychosis. The younger van Helmont held this opinion, and the ingenious author of some metaphysical *Meditations*, published in 1678 under the name of William Wander, appears to have some leaning towards it. The second opinion is that of *Traduction*, as if the soul of children were engendered (*per traducem*) from the soul or souls of those from whom the body is engendered. St. Augustine inclined to this judgement the better to explain original sin. This doctrine is taught also by most of the theologians of the Augsburg Confession. Nevertheless it is not completely established among them, since the Universities of Jena and Helmstedt, and others besides, have long been opposed to it. The third opinion, and that most widely accepted to-day, is that of *Creation*: it is taught in the majority of the Christian Schools, but it is fraught with the greatest difficulty in respect of original sin.

87. Into this controversy of theologians on the origin of the human soul has entered the philosophic dispute on *the origin of forms.* Aristotle and scholastic philosophy after him called *Form* that which is a principle of action and is found in that which acts. This inward principle is either substantial, being then termed ‘Soul’, when it is in an organic body, or accidental, and customarily termed ‘Quality’. The same philosopher gave to the soul the generic name of ‘Entelechy’ or *Act*. This word ‘Entelechy’ apparently takes its origin from the Greek word signifying ‘perfect’, and

hence the celebrated Ermolao Barbaro expressed it literally in Latin by *perfectihabia*: for Act is a realization of potency. And he had no need to consult the Devil, as men say he did, in order to learn that. Now the Philosopher of Stagira supposes that there are two kinds of Act, the permanent act and the successive act. The permanent or lasting act is nothing but the Substantial or Accidental Form: the substantial form (as for example the soul) is altogether permanent, at least according to my judgement, and the accidental is only so for a time. But the altogether momentary act, whose nature is transitory, consists in action itself. I have shown elsewhere that the notion of Entelechy is not altogether to be scorned, and that, being permanent, it carries with it not only a mere faculty for action, but also that which is called 'force', 'effort', 'conatus', from which action itself must follow if nothing prevents it. Faculty is only an *attribute*, or rather sometimes a mode; but force, when it is not an ingredient of substance itself (that is, force which is not primitive but derivative), is a *quality*, which is distinct and separable from substance. I have shown also how one may suppose that the soul is a primitive force which is modified and varied by derivative forces or qualities, and exercised in actions.

88. Now philosophers have troubled themselves exceedingly on the question of the origin of substantial forms. For to say that the compound of form and matter is produced and that the form is only *comproduced* means nothing. The common opinion was that forms were derived from the potency of matter, this being called *Eduction*. That also meant in fact nothing, but it was explained in a sense by a comparison with shapes: for that of a statue is produced only by removal of the superfluous marble. This comparison might be valid if form consisted in a mere limitation, as in the case of shape. Some have thought that forms were sent from heaven, and even created expressly, when bodies were produced. Julius Scaliger hinted

that it was possible that forms were rather derived from the active potency of the efficient cause (that is to say, either from that of God in the case of Creation or from that of other forms in the case of generation), than from the passive potency of matter. And that, in the case of generation, meant a return to traduction. Daniel Sennert, a famous doctor and physicist at Wittenberg, cherished this opinion, particularly in relation to animate bodies which are multiplied through seed. A certain Julius Caesar della Galla, an Italian living in the Low Countries, and a doctor of Groningen named Johan Freitag wrote with much vehemence in opposition to Sennert. Johann Sperling, a professor at Wittenberg, made a defence of his master, and finally came into conflict with Johann Zeisold, a professor at Jena, who upheld the belief that the human soul is created.

89. But traduction and eduction are equally inexplicable when it is a question of finding the origin of the soul. It is not the same with accidental forms, since they are only modifications of the substance, and their origin may be explained by eduction, that is, by variation of limitations, in the same way as the origin of shapes. But it is quite another matter when we are concerned with the origin of a substance, whose beginning and destruction are equally difficult to explain. Sennert and Sperling did not venture to admit the subsistence and the indestructibility of the souls of beasts or of other primitive forms, although they allowed that they were indivisible and immaterial. But the fact is that they confused indestructibility with immortality, whereby is understood in the case of man that not only the soul but also the personality subsists. In saying that the soul of man is immortal one implies the subsistence of what makes the identity of the person, something which retains its moral qualities, conserving the *consciousness*, or the reflective inward feeling, of what it is: thus it is rendered susceptible to chastisement or reward. But this conservation of personality does not occur in the souls of beasts: that is why I prefer to say that they are

imperishable rather than to call them immortal. Yet this misapprehension appears to have been the cause of a great inconsistency in the doctrine of the Thomists and of other good philosophers: they recognized the immateriality or indivisibility of all souls, without being willing to admit their indestructibility, greatly to the prejudice of the immortality of the human soul. John Scot, that is, the Scotsman (which formerly signified Hibernian or Erigena), a famous writer of the time of Louis the Debonair and of his sons, was for the conservation of all souls: and I see not why there should be less objection to making the atoms of Epicurus or of Gassendi endure, than to affirming the subsistence of all truly simple and indivisible substances, which are the sole and true atoms of Nature. And Pythagoras was right in saying generally, as Ovid makes him say:

Morte carent animae.

90. Now as I like maxims which hold good and admit of the fewest exceptions possible, here is what has appeared to me most reasonable in every sense on this important question. I consider that souls and simple substances altogether cannot begin except by creation, or end except by annihilation. Moreover, as the formation of organic animate bodies appears explicable in the order of nature only when one assumes a *preformation* already organic, I have thence inferred that what we call generation of an animal is only a transformation and augmentation. Thus, since the same body was already furnished with organs, it is to be supposed that it was already animate, and that it had the same soul: so I assume *vice versa*, from the conservation of the soul when once it is created, that the animal is also conserved, and that apparent death is only an envelopment, there being no likelihood that in the order of nature souls exist entirely separated from all body, or that what does not begin naturally can cease through natural forces.

91. Considering that so admirable an order and rules so general are established in regard to animals, it does not appear reasonable that man

should be completely excluded from that order, and that everything in relation to his soul should come about in him by miracle. Besides I have pointed out repeatedly that it is of the essence of God's wisdom that all should be harmonious in his works, and that nature should be parallel with grace. It is thus my belief that those souls which one day shall be human souls, like those of other species, have been in the seed, and in the progenitors as far back as Adam, and have consequently existed since the beginning of things, always in a kind of organic body. On this point it seems that M. Swammerdam, Father Malebranche, M. Bayle, Mr. Pitcairne, M. Hartsoeker and numerous other very able persons share my opinion. This doctrine is also sufficiently confirmed by the microscope observations of M. Leeuwenhoek and other good observers. But it also for divers reasons appears likely to me that they existed then as sentient or animal souls only, endowed with perception and feeling, and devoid of reason. Further I believe that they remained in this state up to the time of the generation of the man to whom they were to belong, but that then they received reason, whether there be a natural means of raising a sentient soul to the degree of a reasoning soul (a thing I find it difficult to imagine) or whether God may have given reason to this soul through some special operation, or (if you will) by a kind of *transcreation*. This latter is easier to admit, inasmuch as revelation teaches much about other forms of immediate operation by God upon our souls. This explanation appears to remove the obstacles that beset this matter in philosophy or theology. For the difficulty of the origin of forms thus disappears completely; and besides it is much more appropriate to divine justice to give the soul, already corrupted *physically* or on the animal side by the sin of Adam, a new perfection which is reason, than to put a reasoning soul, by creation or otherwise, in a body wherein it is to be corrupted *morally*.

92. Now the soul being once under the domination of sin, and ready to commit sin in actual fact as soon as the man is fit to exercise reason, a new question arises, to wit: whether this tendency in a man who has not been regenerated by baptism suffices to damn him, even though he should never come to commit sin, as may happen, and happens often, whether he die before reaching years of discretion or he become dull of sense before he has made use of his reason. St. Gregory of Nazianzos is supposed to have denied this (*Orat. de Baptismo*); but St. Augustine is for the affirmative, and maintains that original sin of itself is sufficient to earn the flames of hell, although this opinion is, to say the least, very harsh. When I speak here of damnation or of hell, I mean pains, and not mere deprivation of supreme felicity; I mean *poenam sensus, non damni*. Gregory of Rimini, General of the Augustinians, with a few others followed St. Augustine in opposition to the accepted opinion of the Schools of his time, and for that reason he was called the torturer of children, *tortor infantum*. The Schoolmen, instead of sending them into the flames of hell, have assigned to them a special Limbo, where they do not suffer, and are only punished by privation of the beatific vision. The Revelations of St. Birgitta (as they are called), much esteemed in Rome, also uphold this dogma. Salmeron and Molina, and before them Ambrose Catharin and others, grant them a certain natural bliss; and Cardinal Sfondrati, a man of learning and piety, who approves this, latterly went so far as to prefer in a sense their state, which is the state of happy innocence, to that of a sinner saved, as we may see in his *Nodus Praedestinationis Solutus*. That, however, seems to go too far. Certainly a soul truly enlightened would not wish to sin, even though it could by this means obtain all imaginable pleasures. But the case of choosing between sin and true bliss is simply chimerical, and it is better to obtain bliss (even after repentance) than to be deprived of it for ever.

93. Many prelates and theologians of France who are well pleased to differ from Molina, and to join with St. Augustine, seem to incline towards the opinion of this great doctor, who condemns to eternal flames children that die in the age of innocence before having received baptism. This is what appears from the letter mentioned above, written by five distinguished prelates of France to Pope Innocent XII, against that posthumous book by Cardinal Sfondrati. But therein they did not venture to condemn the doctrine of the purely privative punishment of children dying without baptism, seeing it approved by the venerable Thomas Aquinas, and by other great men. I do not speak of those who are called on one side Jansenists and on the other disciples of St. Augustine, for they declare themselves entirely and firmly for the opinion of this Father. But it must be confessed that this opinion has not sufficient foundation either in reason or in Scripture, and that it is outrageously harsh. M. Nicole makes rather a poor apology for it in his book on the *Unity of the Church*, written to oppose M. Jurieu, although M. Bayle takes his side in chapter 178 of the *Reply to the Questions of a Provincial*, vol. III. M. Nicole makes use of this pretext, that there are also other dogmas in the Christian religion which appear harsh. On the one hand, however, that does not lead to the conclusion that these instances of harshness may be multiplied without proof; and on the other we must take into account that the other dogmas mentioned by M. Nicole, namely original sin and eternity of punishment, are only harsh and unjust to outward appearance, while the damnation of children dying without actual sin and without regeneration would in truth be harsh, since it would be in effect the damning of innocents. For that reason I believe that the party which advocates this opinion will never altogether have the upper hand in the Roman Church itself. Evangelical theologians are accustomed to speak with fair moderation on this question, and to surrender these souls to the judgement and the clemency of their Creator. Nor do we know all the

wonderful ways that God may choose to employ for the illumination of souls.

94. One may say that those who condemn for original sin alone, and who consequently condemn children dying unbaptized or outside the Covenant, fall, in a sense, without being aware of it, into a certain attitude to man's inclination and God's foreknowledge which they disapprove in others. They will not have it that God should refuse his grace to those whose resistance to it he foresees, nor that this expectation and this tendency should cause the damnation of these persons: and yet they claim that the tendency which constitutes original sin, and in which God foresees that the child will sin as soon as he shall reach years of discretion, suffices to damn this child beforehand. Those who maintain the one and reject the other do not preserve enough uniformity and connexion in their dogmas.

95. There is scarcely less difficulty in the matter of those who reach years of discretion and plunge into sin, following the inclination of corrupt nature, if they receive not the succour of the grace necessary for them to stop on the edge of the precipice, or to drag themselves from the abyss wherein they have fallen. For it seems hard to damn them eternally for having done that which they had no power to prevent themselves from doing. Those that damn even children, who are without discretion, trouble themselves even less about adults, and one would say that they have become callous through the very expectation of seeing people suffer. But it is not the same with other theologians, and I would be rather on the side of those who grant to all men a grace sufficient to draw them away from evil, provided they have a sufficient tendency to profit by this succour, and not to reject it voluntarily. The objection is made that there has been and still is a countless multitude of men, among civilized peoples and among barbarians, who have never had this knowledge of God and of Jesus Christ which is necessary for those who would tread the wonted paths to salvation. But

without excusing them on the plea of a sin purely philosophical, and without stopping at a mere penalty of privation, things for which there is no opportunity of discussion here, one may doubt the fact: for how do we know whether they do not receive ordinary or extraordinary succour of kinds unknown to us? This maxim, *Quod facienti, quod in se est, non denegatur gratia necessaria*, appears to me to have eternal truth. Thomas Aquinas, Archbishop Bradwardine and others have hinted that, in regard to this, something comes to pass of which we are not aware. (Thom. quest. XIV, *De Veritate*, artic. XI, ad I et alibi. Bradwardine, *De Causa Dei*, non procul ab initio.) And sundry theologians of great authority in the Roman Church itself have taught that a sincere act of the love of God above all things, when the grace of Jesus Christ arouses it, suffices for salvation. Father Francis Xavier answered the Japanese that if their ancestors had used well their natural light God would have given them the grace necessary for salvation; and the Bishop of Geneva, Francis of Sales, gives full approval to this answer (Book 4, *On the Love of God,* ch. 5).

96. This I pointed out some time ago to the excellent M Pélisson, to show him that the Roman Church, going further than the Protestants, does not damn utterly those who are outside its communion, and even outside Christianity, by using as its only criterion explicit faith. Nor did he refute it, properly speaking, in the very kind answer he gave me, and which he published in the fourth part of his *Reflexions*, also doing me the honour of adding to it my letter. I offered him then for consideration what a famous Portuguese theologian, by name Jacques Payva Andradius, envoy to the Council of Trent, wrote concerning this, in opposition to Chemnitz, during this same Council. And now, without citing many other authors of eminence, I will content myself with naming Father Friedrich Spee, the Jesuit, one of the most excellent in his Society, who also held this common opinion upon the efficacy of the love of God, as is apparent in the preface to

the admirable book which he wrote in Germany on the Christian virtues. He speaks of this observation as of a highly important secret of piety, and expatiates with great clearness upon the power of divine love to blot out sin, even without the intervention of the Sacraments of the Catholic Church, provided one scorn them not, for that would not at all be compatible with this love. And a very great personage, whose character was one of the most lofty to be found in the Roman Church, was the first to make me acquainted with it. Father Spee was of a noble family of Westphalia (it may be said in passing) and he died in the odour of sanctity, according to the testimony of him who published this book in Cologne with the approval of the Superiors.

97. The memory of this excellent man ought to be still precious to persons of knowledge and good sense, because he is the author of the book entitled: *Cautio Criminalis circa Processus contra Sagas*, which has caused much stir, and has been translated into several languages. I learnt from the Grand Elector of Mainz, Johann Philipp von Schonborn, uncle of His Highness the present Elector, who walks gloriously in the footsteps of that worthy predecessor, the story that follows. That Father was in Franconia when there was a frenzy there for burning alleged sorcerers. He accompanied even to the pyre many of them, all of whom he recognized as being innocent, from their confessions and the researches that he had made thereon. Therefore in spite of the danger incurred at that time by one telling the truth in this matter, he resolved to compile this work, without however naming himself. It bore great fruit and on this matter converted that Elector, at that time still a simple canon and afterwards Bishop of Würzburg, finally also Archbishop of Mainz, who, as soon as he came to power, put an end to these burnings. Therein he was followed by the Dukes of Brunswick, and finally by the majority of the other princes and states of Germany.

98. This digression appeared to me to be seasonable, because that writer deserves to be more widely known. Returning now to the subject I make a

further observation. Supposing that to-day a knowledge of Jesus Christ according to the flesh is absolutely necessary to salvation, as indeed it is safest to teach, it will be possible to say that God will give that knowledge to all those who do, humanly speaking, that which in them lies, even though God must needs give it by a miracle. Moreover, we cannot know what passes in souls at the point of death; and if sundry learned and serious theologians claim that children receive in baptism a kind of faith, although they do not remember it afterwards when they are questioned about it, why should one maintain that nothing of a like nature, or even more definite, could come about in the dying, whom we cannot interrogate after their death? Thus there are countless paths open to God, giving him means of satisfying his justice and his goodness: and the only thing one may allege against this is that we know not what way he employs; which is far from being a valid objection.

99. Let us pass on to those who lack not power to amend, but good will. They are doubtless not to be excused; but there always remains a great difficulty concerning God, since it rested with him to give them this same good will. He is the master of wills, the hearts of kings and those of all other men are in his hand. Holy Scripture goes so far as to say that God at times hardened the wicked in order to display his power by punishing them. This hardening is not to be taken as meaning that God inspires men with a kind of anti-grace, that is, a kind of repugnance to good, or even an inclination towards evil, just as the grace that he gives is an inclination towards good. It is rather that God, having considered the sequence of things that he established, found it fitting, for superior reasons, to permit that Pharaoh, for example, should be in such *circumstances* as should increase his wickedness, and divine wisdom willed to derive a good from this evil.

100. Thus it all often comes down to *circumstances*, which form a part of the combination of things. There are countless examples of small circumstances serving to convert or to pervert. Nothing is more widely known than the *Tolle, lege* (Take and read) cry which St. Augustine heard in a neighbouring house, when he was pondering on what side he should take among the Christians divided into sects, and saying to himself,

Quod vitae sectabor iter?

This brought him to open at random the book of the Holy Scriptures which he had before him, and to read what came before his eyes: and these were words which finally induced him to give up Manichaeism. The good Steno, a Dane, who was titular Bishop of Titianopolis, Vicar Apostolic (as they say) of Hanover and the region around, when there was a Duke Regent of his religion, told us that something of that kind had happened to him. He was a great anatomist and deeply versed in natural science; but he unfortunately gave up research therein, and from being a great physicist he became a mediocre theologian. He would almost listen to nothing more about the marvels of Nature, and an express order from the Pope *in virtute sanctae obedientiae* was needed to extract from him the observations M. Thévenot asked of him. He told us then that what had greatly helped towards inducing him to place himself on the side of the Roman Church had been the voice of a lady in Florence, who had cried out to him from a window: 'Go not on the side where you are about to go, sir, go on the other side.' 'That voice struck me,' he told us, 'because I was just meditating upon religion.' This lady knew that he was seeking a man in the house where she was, and, when she saw him making his way to the other house, wished to point out where his friend's room was.

101. Father John Davidius, the Jesuit, wrote a book entitled *Veridicus Christianus*, which is like a kind of *Bibliomancy*, where one takes passages at random, after the pattern of the *Tolle, lege* of St. Augustine, and it is like

a devotional game. But the chances to which, in spite of ourselves, we are subject, play only too large a part in what brings salvation to men, or removes it from them. Let us imagine twin Polish children, the one taken by the Tartars, sold to the Turks, brought to apostasy, plunged in impiety, dying in despair; the other saved by some chance, falling then into good hands to be educated properly, permeated by the soundest truths of religion, exercised in the virtues that it commends to us, dying with all the feelings of a good Christian. One will lament the misfortune of the former, prevented perhaps by a slight circumstance from being saved like his brother, and one will marvel that this slight chance should have decided his fate for eternity.

102. Someone will perchance say that God foresaw by mediate knowledge that the former would have been wicked and damned even if he had remained in Poland. There are perhaps conjunctures wherein something of the kind takes place. But will it therefore be said that this is a general rule, and that not one of those who were damned amongst the pagans would have been saved if he had been amongst Christians? Would that not be to contradict our Lord, who said that Tyre and Sidon would have profited better by his preaching, if they had had the good fortune to hear it, than Capernaum?

103. But were one to admit even here this use of mediate knowledge against all appearances, this knowledge still implies that God considers what a man would do in such and such circumstances; and it always remains true that God could have placed him in other circumstances more favourable, and given him inward or outward succour capable of vanquishing the most abysmal wickedness existing in any soul. I shall be told that God is not bound to do so, but that is not enough; it must be added that greater reasons prevent him from making all his goodness felt by all. Thus there must needs be choice; but I do not think one must seek the

reason altogether in the good or bad nature of men. For if with some people one assume that God, choosing the plan which produces the most good, but which involves sin and damnation, has been prompted by his wisdom to choose the best natures in order to make them objects of his grace, this grace would not sufficiently appear to be a free gift. Accordingly man will be distinguishable by a kind of inborn merit, and this assumption seems remote from the principles of St. Paul, and even from those of Supreme Reason.

104. It is true that there are reasons for God's choice, and the consideration of the object, that is, the nature of man, must needs enter therein; but it does not seem that this choice can be subjected to a rule such as we are capable of conceiving, and such as may flatter the pride of men. Some famous theologians believe that God offers more grace, and in a more favourable way, to those whose resistance he foresees will be less, and that he abandons the rest to their self-will. We may readily suppose that this is often the case, and this expedient, among those which make man distinguishable by anything favourable in his nature, is the farthest removed from Pelagianism. But I would not venture, notwithstanding, to make of it a universal rule. Moreover, that we may not have cause to vaunt ourselves, it is necessary that we be ignorant of the reasons for God's choice. Those reasons are too diverse to become known to us; and it may be that God at times shows the power of his grace by overcoming the most obstinate resistance, to the end that none may have cause either to despair or to be puffed up. St. Paul, as it would seem, had this in mind when he offered himself as an example. God, he said, has had mercy upon me, to give a great example of his patience.

105. It may be that fundamentally all men are equally bad, and consequently incapable of being distinguished the one from the other through their good or less bad natural qualities; but they are not bad all in

the same way: for there is an inherent individual difference between souls, as the Pre-established Harmony proves. Some are more or less inclined towards a particular good or a particular evil, or towards their opposites, all in accordance with their natural dispositions. But since the general plan of the universe, chosen by God for superior reasons, causes men to be in different circumstances, those who meet with such as are more favourable to their nature will become more readily the least wicked, the most virtuous, the most happy; yet it will be always by aid of the influence of that inward grace which God unites with the circumstances. Sometimes it even comes to pass, in the progress of human life, that a more excellent nature succeeds less, for lack of cultivation or opportunities. One may say that men are chosen and ranged not so much according to their excellence as according to their conformity with God's plan. Even so it may occur that a stone of lesser quality is made use of in a building or in a group because it proves to be the particular one for filling a certain gap.

106. But, in fine, all these attempts to find reasons, where there is no need to adhere altogether to certain hypotheses, serve only to make clear to us that there are a thousand ways of justifying the conduct of God. All the disadvantages we see, all the obstacles we meet with, all the difficulties one may raise for oneself, are no hindrance to a belief founded on reason, even when it cannot stand on conclusive proof, as has been shown and will later become more apparent, that there is nothing so exalted as the wisdom of God, nothing so just as his judgements, nothing so pure as his holiness, and nothing more vast than his goodness.

PART TWO

107. HITHERTO I have devoted myself to giving a full and clear exposition of this whole subject: and although I have not yet spoken of M. Bayle's objections in particular, I have endeavoured to anticipate them, and to suggest ways of answering them. But as I have taken upon myself the task of meeting them in detail, not only because there will perhaps still be passages calling for elucidation, but also because his arguments are usually full of wit and erudition, and serve to throw greater light on this controversy, it will be well to give an account of the chief objections that are dispersed through his works, and to add my answers. At the beginning I observed 'that God co-operates in moral evil, and in physical evil, and in each of them both morally and physically; and that man co-operates therein also morally and physically in a free and active way, becoming in consequence subject to blame and punishment'. I have shown also that each point has its own difficulty; but the greatest of these lies in maintaining that God co-operates morally in moral evil, that is, in sin, without being the originator of the sin, and even without being accessary thereto.

108. He does this by *permitting* it justly, and by *directing* it wisely towards the good, as I have shown in a manner that appears tolerably intelligible. But as it is here principally that M. Bayle undertakes to discomfit those who maintain that there is nothing in faith which cannot be harmonized with reason, it is also here especially I must show that my dogmas are fortified (to make use of his own allegory) with a rampart, even of reasons, which is able to resist the fire of his strongest batteries. He has ranged them against me in chapter 144 of his *Reply to the Questions of a Provincial* (vol. III,), where he includes the theological doctrine in seven

propositions and opposes thereto nineteen philosophic maxims, like so many large cannon capable of breaching my rampart. Let us begin with the theological propositions.

109. I. ‘God,’ he says, ‘the Being eternal and necessary, infinitely good, holy, wise and powerful, possesses from all eternity a glory and a bliss that can never either increase or diminish.’ This proposition of M. Bayle’s is no less philosophical than theological. To say that God possesses a ‘glory’ when he is alone, that depends upon the meaning of the term. One may say, with some, that glory is the satisfaction one finds in being aware of one’s own perfections; and in this sense God possesses it always. But when glory signifies that others become aware of these perfections, one may say that God acquires it only when he reveals himself to intelligent creatures; even though it be true that God thereby gains no new good, and it is rather the rational creatures who thence derive advantage, when they apprehend aright the glory of God.

110. II. ‘He resolved freely upon the production of creatures, and he chose from among an infinite number of possible beings those whom it pleased him to choose, to give them existence, and to compose the universe of them, while he left all the rest in nothingness.’ This proposition is also, just like the preceding one, in close conformity with that part of philosophy which is called natural theology. One must dwell a little on what is said here, that he chose the possible beings ‘whom it pleased him to choose’. For it must be borne in mind that when I say, ‘that pleases me’, it is as though I were saying, ‘I find it good’. Thus it is the ideal goodness of the object which pleases, and which makes me choose it among many others which do not please or which please less, that is to say, which contain less of that goodness which moves me. Now it is only the genuinely good that is capable of pleasing God: and consequently that which pleases God most, and which meets his choice, is the best.

111. III. ‘Human nature having been among the Beings that he willed to produce, he created a man and a woman, and granted them amongst other favours free will, so that they had the power to obey him; but he threatened them with death if they should disobey the order that he gave them to abstain from a certain fruit.’ This proposition is in part revealed, and should be admitted without difficulty, provided that *free will* be understood properly, according to the explanation I have given.

112. IV. ‘They ate thereof nevertheless, and thenceforth they were condemned, they and all their posterity, to the miseries of this life, to temporal death and eternal damnation, and made subject to such a tendency to sin that they abandoned themselves thereto endlessly and without ceasing.’ There is reason to suppose that the forbidden action by itself entailed these evil results in accordance with a natural effect, and that it was for that very reason, and not by a purely arbitrary decree, that God had forbidden it: much as one forbids knives to children. The famous Fludde or de Fluctibus, an Englishman, once wrote a book *De Vita, Morte et Resurrectione* under the name of R. Otreb, wherein he maintained that the fruit of the forbidden tree was a poison: but we cannot enter into this detail. It suffices that God forbade a harmful thing; one must not therefore suppose that God acted here simply in the character of a legislator who enacts a purely positive law, or of a judge who imposes and inflicts a punishment by an order of his will, without any connexion between the evil of guilt and the evil of punishment. And it is not necessary to suppose that God in justifiable annoyance deliberately put a corruption in the soul and the body of man, by an extraordinary action, in order to punish him: much as the Athenians gave hemlock-juice to their criminals. M. Bayle takes the matter thus: he speaks as if the original corruption had been put in the soul of the first man by an order and operation of God. It is that which calls forth his

objection (*Reply to the Questions of a Provincial*, vol. III, ch. 178,) 'that reason would not commend the monarch who, in order to chastise a rebel, condemned him and his descendants to have a tendency towards rebellion'. But this chastisement happens naturally to the wicked, without any ordinance of a legislator, and they become addicted to evil. If drunkards begot children inclined to the same vice, by a natural consequence of what takes place in bodies, that would be a punishment of their progenitors, but it would not be a penalty of law. There is something comparable to this in the consequences of the first man's sin. For the contemplation of divine wisdom leads us to believe that the realm of nature serves that of grace; and that God as an Architect has done all in a manner befitting God considered as a Monarch. We do not sufficiently know the nature of the forbidden fruit, or that of the action, or its effects, to judge of the details of this matter: nevertheless we must do God justice so far as to believe that it comprised something other than what painters depict for us.

113. V. 'It has pleased him by his infinite mercy to deliver a very few men from this condemnation; and, leaving them exposed during this life to the corruption of sin and misery, he has given them aids which enable them to obtain the never-ending bliss of paradise.' Many in the past have doubted, as I have already observed, whether the number of the damned is so great as is generally supposed; and it appears that they believed in the existence of some intermediate state between eternal damnation and perfect bliss. But we have no need of these opinions, and it is enough to keep to the ideas accepted in the Church. In this connexion it is well to observe that this proposition of M. Bayle's is conceived in accordance with the principles of sufficient grace, given to all men, and sufficing them provided that they have good will. Although M. Bayle holds the opposite opinion, he wished (as he states in the margin) to avoid the terms that would not agree with a system of decrees subsequent to the prevision of contingent events.

114. VI. ‘He foresaw from eternity all that which should happen, he ordered all things and placed them each one in its own place, and he guides and controls them continually, according to his pleasure. Thus nothing is done without his permission or against his will, and he can prevent, as seems good to him, as much and as often as seems good to him, all that does not please him, and in consequence sin, which is the thing in the world that most offends him and that he most detests; and he can produce in each human soul all the thoughts that he approves.’ This thesis is also purely philosophic, that is, recognizable by the light of natural reason. It is opportune also, as one has dwelt in thesis II on *that which pleases*, to dwell here upon *that which seems good*, that is, upon that which God finds good to do. He can avoid or put away as ‘seems good to him’ all ‘that does not please him’. Nevertheless it must be borne in mind that some objects of his aversion, such as certain evils, and especially sin, which his antecedent will repelled, could only have been rejected by his consequent or decretory will, in so far as it was prompted by the rule of the best, which the All-wise must choose after having taken all into account. When one says ‘that sin offends God most, and that he detests it most’, these are human ways of speaking. God cannot, properly speaking, be *offended*, that is, injured, disturbed, disquieted or angered; and he *detests* nothing of that which exists, in the sense that to detest something is to look upon it with abomination and in a way that causes us disgust, that greatly pains and distresses us; for God cannot suffer either vexation, or grief or discomfort; he is always altogether content and at ease. Yet these expressions in their true sense are justified. The supreme goodness of God causes his antecedent will to repel all evil, but moral evil more than any other: it only admits evil at all for irresistible superior reasons, and with great correctives which repair its ill effects to good advantage. It is true also that God could produce in each human soul

all the thoughts that he approves: but this would be to act by miracles, more than his most perfectly conceived plan admits.

115. VII. ‘He offers grace to people that he knows are destined not to accept it, and so destined by this refusal to make themselves more criminal than they would be if he had not offered them that grace; he assures them that it is his ardent wish that they accept it, and he does not give them the grace which he knows they would accept.’ It is true that these people become more criminal through their refusal than if one had offered them nothing, and that God knows this. Yet it is better to permit their crime than to act in a way which would render God himself blameworthy, and provide the criminals with some justification for the complaint that it was not possible for them to do better, even though they had or might have wished it. God desires that they receive such grace from him as they are fit to receive, and that they accept it; and he desires to give them in particular that grace whose acceptance by them he foresees: but it is always by a will antecedent, detached or particular, which cannot always be carried out in the general plan of things. This thesis also is among the number of those which philosophy establishes no less than revelation, like three others of the seven that we have just stated here, the third, fourth and fifth being the only ones where revelation is necessary.

116. Here now are the nineteen philosophic maxims which M. Bayle opposes to the seven theological propositions.

I. ‘As the infinitely perfect Being finds in himself a glory and a bliss that can never either diminish or increase, his goodness alone has determined him to create this universe: neither the ambition to be praised, nor any interested motive of preserving or augmenting his bliss and his glory, has had any part therein.’ This maxim is very good: praises of God do him no service, but they are of service to the men who praise him, and he desired

their good. Nevertheless, when one says that *goodness* alone determined God to create this universe, it is well to add that his goodness prompted him *antecedently* to create and to produce all possible good; but that his wisdom made the choice and caused him to select the best *consequently*; and finally that his power gave him the means to carry out *actually* the great design which he had formed.

117. II. 'The goodness of the infinitely perfect Being is infinite, and would not be infinite if one could conceive of a goodness greater than this. This characteristic of infinity is proper also to all his other perfections, to love of virtue, hatred of vice, etc. they must be the greatest one can imagine. (See M. Jurieu in the first three sections of the *Judgement on Methods*, where he argues constantly upon this principle, as upon a primary notion. See also in Wittich, *De Providentia Dei*, n. 12, these words of St. Augustine, lib. I, *De Doctrina Christiana*, c. 7: "Cum cogitatur Deus, ita cogitatur, ut aliquid, quo nihil melius sit atque sublimius. Et paulo post: Nec quisquam inveniri potest, qui hoc Deum credat esse, quo melius aliquid est.")'

This maxim is altogether to my liking, and I draw from it this conclusion, that God does the very best possible: otherwise the exercise of his goodness would be restricted, and that would be restricting his *goodness* itself, if it did not prompt him to the best, if he were lacking in good will. Or again it would be restricting his *wisdom* and his *power*, if he lacked the knowledge necessary for discerning the best and for finding the means to obtain it, or if he lacked the strength necessary for employing these means. There is, however, ambiguity in the assertion that love of virtue and hatred of vice are infinite in God: if that were absolutely and unreservedly true, in practice there would be no vice in the world. But although each one of God's perfections is infinite in itself, it is exercised only in proportion to the object and as the nature of things prompts it. Thus love of the best in the

whole carries the day over all other individual inclinations or hatreds; it is the only impulse whose very exercise is absolutely infinite, nothing having power to prevent God from declaring himself for the best; and some vice being combined with the best possible plan, God permits it.

118. III. ‘An infinite goodness having guided the Creator in the production of the world, all the characteristics of knowledge, skill, power and greatness that are displayed in his work are destined for the happiness of intelligent creatures. He wished to show forth his perfections only to the end that creatures of this kind should find their felicity in the knowledge, the admiration and the love of the Supreme Being.’

This maxim appears to me not sufficiently exact. I grant that the happiness of intelligent creatures is the principal part of God’s design, for they are most like him; but nevertheless I do not see how one can prove that to be his sole aim. It is true that the realm of nature must serve the realm of grace: but, since all is connected in God’s great design, we must believe that the realm of grace is also in some way adapted to that of nature, so that nature preserves the utmost order and beauty, to render the combination of the two the most perfect that can be. And there is no reason to suppose that God, for the sake of some lessening of moral evil, would reverse the whole order of nature. Each perfection or imperfection in the creature has its value, but there is none that has an infinite value. Thus the moral or physical good and evil of rational creatures does not infinitely exceed the good and evil which is simply metaphysical, namely that which lies in the perfection of the other creatures; and yet one would be bound to say this if the present maxim were strictly true. When God justified to the Prophet Jonah the pardon that he had granted to the inhabitants of Nineveh, he even touched upon the interest of the beasts who would have been involved in the ruin of this great city. No substance is absolutely contemptible or absolutely precious before God. And the abuse or the exaggerated extension

of the present maxim appears to be in part the source of the difficulties that M. Bayle puts forward. It is certain that God sets greater store by a man than a lion; nevertheless it can hardly be said with certainty that God prefers a single man in all respects to the whole of lion-kind. Even should that be so, it would by no means follow that the interest of a certain number of men would prevail over the consideration of a general disorder diffused through an infinite number of creatures. This opinion would be a remnant of the old and somewhat discredited maxim, that all is made solely for man.

119. IV. 'The benefits he imparts to the creatures that are capable of felicity tend only to their happiness. He therefore does not permit that these should serve to make them unhappy, and, if the wrong use that they made of them were capable of destroying them, he would give them sure means of always using them well. Otherwise they would not be true benefits, and his goodness would be smaller than that we can conceive of in another benefactor. (I mean, in a Cause that united with its gifts the sure skill to make good use of them.)'

There already is the abuse or the ill effect of the preceding maxim. It is not strictly true (though it appear plausible) that the benefits God imparts to the creatures who are capable of felicity tend solely to their happiness. All is connected in Nature; and if a skilled artisan, an engineer, an architect, a wise politician often makes one and the same thing serve several ends, if he makes a double hit with a single throw, when that can be done conveniently, one may say that God, whose wisdom and power are perfect, does so always. That is husbanding the ground, the time, the place, the material, which make up as it were his outlay. Thus God has more than one purpose in his projects. The felicity of all rational creatures is one of the aims he has in view; but it is not his whole aim, nor even his final aim. Therefore it happens that the unhappiness of some of these creatures may come about *by concomitance*, and as a result of other greater goods: this I have already

explained, and M. Bayle has to some extent acknowledged it. The goods as such, considered in themselves, are the object of the antecedent will of God. God will produce as much reason and knowledge in the universe as his plan can admit. One can conceive of a mean between an antecedent will altogether pure and primitive, and a consequent and final will. The *primitive antecedent will* has as its object each good and each evil in itself, detached from all combination, and tends to advance the good and prevent the evil. The *mediate will* relates to combinations, as when one attaches a good to an evil: then the will will have some tendency towards this combination when the good exceeds the evil therein. But the *final and decisive will* results from consideration of all the goods and all the evils that enter into our deliberation, it results from a total combination. This shows that a mediate will, although it may in a sense pass as consequent in relation to a pure and primitive antecedent will, must be considered antecedent in relation to the final and decretory will. God gives reason to the human race; misfortunes arise thence by concomitance. His pure antecedent will tends towards giving reason, as a great good, and preventing the evils in question. But when it is a question of the evils that accompany this gift which God has made to us of reason, the compound, made up of the combination of reason and of these evils, will be the object of a mediate will of God, which will tend towards producing or preventing this compound, according as the good or the evil prevails therein. But even though it should prove that reason did more harm than good to men (which, however, I do not admit), whereupon the mediate will of God would discard it with all its concomitants, it might still be the case that it was more in accordance with the perfection of the universe to give reason to men, notwithstanding all the evil consequences which it might have with reference to them. Consequently, the final will or the decree of God, resulting from all the considerations he can have, would be to give it to them. And, far from being subject to blame for this, he

would be blameworthy if he did not so. Thus the evil, or the mixture of goods and evils wherein the evil prevails, happens only *by concomitance*, because it is connected with greater goods that are outside this mixture. This mixture, therefore, or this compound, is not to be conceived as a grace or as a gift from God to us; but the good that is found mingled therein will nevertheless be good. Such is God's gift of reason to those who make ill use thereof. It is always a good in itself; but the combination of this good with the evils that proceed from its abuse is not a good with regard to those who in consequence thereof become unhappy. Yet it comes to be by concomitance, because it serves a greater good in relation to the universe. And it is doubtless that which prompted God to give reason to those who have made it an instrument of their unhappiness. Or, to put it more precisely, in accordance with my system God, having found among the possible beings some rational creatures who misuse their reason, gave existence to those who are included in the best possible plan of the universe. Thus nothing prevents us from admitting that God grants goods which turn into evil by the fault of men, this often happening to men in just punishment of the misuse they had made of God's grace. Aloysius Novarinus wrote a book *De Occultis Dei Beneficiis*: one could write one *De Occultis Dei Poenis*. This saying of Claudian would be in place here with regard to some persons:

Tolluntur in altum, Ut lapsu graviore ruant.

But to say that God should not give a good which he knows an evil will will abuse, when the general plan of things demands that he give it; or again to say that he should give certain means for preventing it, contrary to this same general order: that is to wish (as I have observed already) that God himself become blameworthy in order to prevent man from being so. To object, as people do here, that the goodness of God would be smaller than that of another benefactor who would give a more useful gift, is to overlook

the fact that the goodness of a benefactor is not measured by a single benefit. It may well be that a gift from a private person is greater than one from a prince, but the gifts of this private person all taken together will be much inferior to the prince's gifts all together. Thus one can esteem fittingly the good things done by God only when one considers their whole extent by relating them to the entire universe. Moreover, one may say that the gifts given in the expectation that they will harm are the gifts of an enemy, ʽεχθρων δωρα αδωρα,

Hostibus eveniant talia dona meis.

But that applies to when there is malice or guilt in him who gives them, as there was in that Eutrapelus of whom Horace speaks, who did good to people in order to give them the means of destroying themselves. His design was evil, but God's design cannot be better than it is. Must God spoil his system, must there be less beauty, perfection and reason in the universe, because there are people who misuse reason? The common sayings are in place here: *Abusus non tollit usum*; there is *scandalum datum et scandalum acceptum*.

120. V. 'A maleficent being is very capable of heaping magnificent gifts upon his enemies, when he knows that they will make thereof a use that will destroy them. It therefore does not beseem the infinitely good Being to give to creatures a free will, whereof, as he knows for certain, they would make a use that would render them unhappy. Therefore if he gives them free will he combines with it the art of using it always opportunely, and permits not that they neglect the practice of this art in any conjuncture; and if there were no sure means of determining the good use of this free will, he would rather take from them this faculty, than allow it to be the cause of their unhappiness. That is the more manifest, as free will is a grace which he has given them of his own choice and without their asking for it; so that he

would be more answerable for the unhappiness it would bring upon them than if he had only granted it in response to their importunate prayers.'

What was said at the end of the remark on the preceding maxim ought to be repeated here, and is sufficient to counter the present maxim. Moreover, the author is still presupposing that false maxim advanced as the third, stating that the happiness of rational creatures is the sole aim of God. If that were so, perhaps neither sin nor unhappiness would ever occur, even by concomitance. God would have chosen a sequence of possibles where all these evils would be excluded. But God would fail in what is due to the universe, that is, in what he owes to himself. If there were only spirits they would be without the required connexion, without the order of time and place. This order demands matter, movement and its laws; to adjust these to spirits in the best possible way means to return to our world. When one looks at things only in the mass, one imagines to be practicable a thousand things that cannot properly take place. To wish that God should not give free will to rational creatures is to wish that there be none of these creatures; and to wish that God should prevent them from misusing it is to wish that there be none but these creatures alone, together with what was made for them only. If God had none but these creatures in view, he would doubtless prevent them from destroying themselves. One may say in a sense, however, that God has given to these creatures the art of always making good use of their free will, for the natural light of reason is this art. But it would be necessary always to have the will to do good, and often creatures lack the means of giving themselves the will they ought to have; often they even lack the will to use those means which indirectly give a good will. Of this I have already spoken more than once. This fault must be admitted, and one must even acknowledge that God would perhaps have been able to exempt creatures from that fault, since there is nothing to prevent, so it seems, the existence of some whose nature it would be always to have good

will. But I reply that it is not necessary, and that it was not feasible for all rational creatures to have so great a perfection, and such as would bring them so close to the Divinity. It may even be that that can only be made possible by a special divine grace. But in this case, would it be proper for God to grant it to all, that is, always to act miraculously in respect of all rational creatures? Nothing would be less rational than these perpetual miracles. There are degrees among creatures: the general order requires it. And it appears quite consistent with the order of divine government that the great privilege of strengthening in the good should be granted more easily to those who had a good will when they were in a more imperfect state, in the state of struggle and of pilgrimage, *in Ecclesia militante, in statu viatorum*. The good angels themselves were not created incapable of sin. Nevertheless I would not dare to assert that there are no blessed creatures born, or such as are sinless and holy by their nature. There are perhaps people who give this privilege to the Blessed Virgin, since, moreover, the Roman Church to-day places her above the angels. But it suffices us that the universe is very great and very varied: to wish to limit it is to have little knowledge thereof. 'But', M. Bayle goes on, 'God has given free will to creatures capable of sinning, without their having asked him for this grace. And he who gave such a gift would be more answerable for the unhappiness that it brought upon those who made use of it, than if he had granted it only in response to their importunate prayers.' But importunity in prayers makes no difference to God; he knows better than we what we need, and he only grants what serves the interest of the whole. It seems that M. Bayle here makes free will consist in the faculty for sinning; yet he acknowledges elsewhere that God and the Saints are free, without having this faculty. However that may be, I have already shown fully that God, doing what his wisdom and his goodness combined ordain, is not answerable for the evil

that he permits. Even men, when they do their duty, are not answerable for consequences, whether they foresee them or not.

121. VI. ‘It is as sure a means of taking a man’s life to give him a silk cord that one knows certainly he will make use of freely to strangle himself, as to plant a few dagger thrusts in his body. One desires his death not less when one makes use of the first way, than when one employs the second: it even seems as though one desires it with a more malicious intention, since one tends to leave to him the whole trouble and the whole blame of his destruction.’

Those who write treatises on Duties (De Officiis) as, for instance, Cicero, St. Ambrose, Grotius, Opalenius, Sharrok, Rachelius, Pufendorf, as well as the Casuists, teach that there are cases where one is not obliged to return to its owner a thing deposited: for example, one will not give back a dagger when one knows that he who has deposited it is about to stab someone. Let us pretend that I have in my hands the fatal draught that Meleager’s mother will make use of to kill him; the magic javelin that Cephalus will unwittingly employ to kill his Procris; the horses of Theseus that will tear to pieces Hippolytus, his son: these things are demanded back from me, and I am right in refusing them, knowing the use that will be made of them. But how will it be if a competent judge orders me to restore them, when I cannot prove to him what I know of the evil consequences that restitution will have, Apollo perchance having given to me, as to Cassandra, the gift of prophecy under the condition that I shall not be believed? I should then be compelled to make restitution, having no alternative other than my own destruction: thus I cannot escape from contributing towards the evil. Another comparison: Jupiter promises Semele, the Sun Phaeton, Cupid Psyche to grant whatever favour the other shall ask. They swear by the Styx,

Di cujus jurare timent et fallere Numen.

One would gladly stop, but too late, the request half heard,

Voluit Deus ora loquentis

Opprimere; exierat jam vox properata sub auras.

One would gladly draw back after the request was made, making vain remonstrances; but they press you, they say to you: ‘Do you make oaths that you will not keep?’ The law of the Styx is inviolable, one must needs submit to it; if one has erred in making the oath, one would err more in not keeping it; the promise must be fulfilled, however harmful it may be to him who exacts it. It would be ruinous to you if you did not fulfil it. It seems as though the moral of these fables implies that a supreme necessity may constrain one to comply with evil. God, in truth, knows no other judge that can compel him to give what may turn to evil, he is not like Jupiter who fears the Styx. But his own wisdom is the greatest judge that he can find, there is no appeal from its judgements: they are the decrees of destiny. The eternal verities, objects of his wisdom, are more inviolable than the Styx. These laws and this judge do not constrain: they are stronger, for they persuade. Wisdom only shows God the best possible exercise of his goodness: after that, the evil that occurs is an inevitable result of the best. I will add something stronger: To permit the evil, as God permits it, is the greatest goodness.

Si mala sustulerat, non erat ille bonus.

One would need to have a bent towards perversity to say after this that it is more malicious to leave to someone the whole trouble and the whole blame of his destruction. When God does leave it to a man, it has belonged to him since before his existence; it was already in the idea of him as still merely possible, before the decree of God which makes him to exist. Can one, then, leave it or give it to another? There is the whole matter.

122. VII. ‘A true benefactor gives promptly, and does not wait to give until those he loves have suffered long miseries from the privation of what he could have imparted to them at first very easily, and without causing any inconvenience to himself. If the limitation of his forces does not permit him to do good without inflicting pain or some other inconvenience, he acquiesces in this, but only regretfully, and he never employs this way of rendering service when he can render it without mingling any kind of evil in his favours. If the profit one could derive from the evils he inflicted could spring as easily from an unalloyed good as from those evils, he would take the straight road of unalloyed good, and not the indirect road that would lead from the evil to the good. If he showers riches and honours, it is not to the end that those who have enjoyed them, when they come to lose them, should be all the more deeply afflicted in proportion to their previous experience of pleasure, and that thus they should become more unhappy than the persons who have always been deprived of these advantages. A malicious being would shower good things at such a price upon the people for whom he had the most hatred.’

(Compare this passage of Aristotle, *Rhetor.* 1. 2, c. 23, p. m. 446: ‘οιον ει δοιη αν τις τινι ‘ινα αφελομενος λειπησηι· ‘οθεν και τουτ’ ειρηται,

πολλοις ‘ο δαιμων ου κατ’ ευνοιαν φερων
Μεγαλα διδωσιν ευτυχηματ’, αλλ’ ‘ινα
τας συμφορας λαβωσιν επιφανεστερας.

Id est: Veluti si quis alicui aliquid det, ut (postea) hoc (ipsi) erepto (ipsum) afficiat dolore. Unde etiam illud est dictum:

Bona magna multis non amicus dat Deus,
Insigniore ut rursus his privet malo.)

All these objections depend almost on the same sophism; they change and mutilate the fact, they only half record things: God has care for men, he

loves the human race, he wishes it well, nothing so true. Yet he allows men to fall, he often allows them to perish, he gives them goods that tend towards their destruction; and when he makes someone happy, it is after many sufferings: where is his affection, where is his goodness or again where is his power? Vain objections, which suppress the main point, which ignore the fact that it is of God one speaks. It is as though one were speaking of a mother, a guardian, a tutor, whose well-nigh only care is concerned with the upbringing, the preservation, the happiness of the person in question, and who neglect their duty. God takes care of the universe, he neglects nothing, he chooses what is best on the whole. If in spite of all that someone is wicked and unhappy, it behoved him to be so. God (so they say) could have given happiness to all, he could have given it promptly and easily, and without causing himself any inconvenience, for he can do all. But should he? Since he does not so, it is a sign that he had to act altogether differently. If we infer from this either that God only regretfully, and owing to lack of power, fails to make men happy and to give the good first of all and without admixture of evil, or else that he lacks the good will to give it unreservedly and for good and all, then we are comparing our true God with the God of Herodotus, full of envy, or with the demon of the poet whose iambics Aristotle quotes, and I have just translated into Latin, who gives good things in order that he may cause more affliction by taking them away. That would be trifling with God in perpetual anthropomorphisms, representing him as a man who must give himself up completely to one particular business, whose goodness must be chiefly exercised upon those objects alone which are known to us, and who lacks either aptitude or good will. God is not lacking therein, he could do the good that we would desire; he even wishes it, taking it separately, but he must not do it in preference to other greater goods which are opposed to it. Moreover, one has no cause to complain of the fact that usually one attains salvation only through many

sufferings, and by bearing the cross of Jesus Christ. These evils serve to make the elect imitators of their master, and to increase their happiness.

123. VIII. ‘The greatest and the most substantial glory that he who is the master of others can gain is to maintain amongst them virtue, order, peace, contentment of mind. The glory that he would derive from their unhappiness can be nothing but a false glory.’

If we knew the city of God just as it is, we should see that it is the most perfect state which can be devised; that virtue and happiness reign there, as far as is possible, in accordance with the laws of the best; that sin and unhappiness (whose entire exclusion from the nature of things reasons of the supreme order did not permit), are well-nigh nothing there in comparison with the good, and even are of service for greater good. Now since these evils were to exist, there must needs be some appointed to be subject to them, and we are those people. If it were others, would there not be the same appearance of evil? Or rather, would not these others be those known as We? When God derives some glory from the evil through having made it serve a greater good, it was proper that he should derive that glory. It is not therefore a false glory, as would be that of a prince who overthrew his state in order to have the honour of setting it up again.

124. IX. ‘The way whereby that master can give proof of greatest love for virtue is to cause it, if he can, to be always practised without any mixture of vice. If it is easy for him to procure for his subjects this advantage, and nevertheless he permits vice to raise its head, save that he punishes it finally after having long tolerated it, his affection for virtue is not the greatest one can conceive; it is therefore not infinite.’

I am not yet half way through the nineteen maxims, and already I am weary of refuting, and making the same answer always. M. Bayle multiplies unnecessarily his so-called maxims in opposition to my dogmas. If things connected together may be separated, the parts from their whole, the human

kind from the universe, God's attributes the one from the other, power from wisdom, it may be said that God *can cause* virtue to be in the world without any mixture of vice, and even that he can do so *easily*. But, since he has permitted vice, it must be that that order of the universe which was found preferable to every other plan required it. One must believe that it is not permitted to do otherwise, since it is not possible to do better. It is a hypothetical necessity, a moral necessity, which, far from being contrary to freedom, is the effect of its choice. *Quae rationi contraria sunt, ea nec fieri a Sapiente posse credendum est*. The objection is made here, that God's affection for virtue is therefore not the greatest which can be conceived, that it is not *infinite*. To that an answer has already been given on the second maxim, in the assertion that God's affection for any created thing whatsoever is proportionate to the value of the thing. Virtue is the noblest quality of created things, but it is not the only good quality of creatures. There are innumerable others which attract the inclination of God: from all these inclinations there results the most possible good, and it turns out that if there were only virtue, if there were only rational creatures, there would be less good. Midas proved to be less rich when he had only gold. And besides, wisdom must vary. To multiply one and the same thing only would be superfluity, and poverty too. To have a thousand well-bound Vergils in one's library, always to sing the airs from the opera of Cadmus and Hermione, to break all the china in order only to have cups of gold, to have only diamond buttons, to eat nothing but partridges, to drink only Hungarian or Shiraz wine — would one call that reason? Nature had need of animals, plants, inanimate bodies; there are in these creatures, devoid of reason, marvels which serve for exercise of the reason. What would an intelligent creature do if there were no unintelligent things? What would it think of, if there were neither movement, nor matter, nor sense? If it had only distinct thoughts it would be a God, its wisdom would be without

bounds: that is one of the results of my meditations. As soon as there is a mixture of confused thoughts, there is sense, there is matter. For these confused thoughts come from the relation of all things one to the other by way of duration and extent. Thus it is that in my philosophy there is no rational creature without some organic body, and there is no created spirit entirely detached from matter. But these organic bodies vary no less in perfection than the spirits to which they belong. Therefore, since God's wisdom must have a world of bodies, a world of substances capable of perception and incapable of reason; since, in short, it was necessary to choose from all the things possible what produced the best effect together, and since vice entered in by this door, God would not have been altogether good, altogether wise if he had excluded it.

125. X. 'The way to evince the greatest hatred for vice is not indeed to allow it to prevail for a long time and then chastise it, but to crush it before its birth, that is, prevent it from showing itself anywhere. A king, for example, who put his finances in such good order that no malversation was ever committed, would thus display more hatred for the wrong done by factionaries than if, after having suffered them to batten on the blood of the people, he had them hanged.'

It is always the same song, it is anthropomorphism pure and simple. A king should generally have nothing so much at heart as to keep his subjects free from oppression. One of his greatest interests is to bring good order into his finances. Nevertheless there are times when he is obliged to tolerate vice and disorders. He has a great war on his hands, he is in a state of exhaustion, he has no choice of generals, it is necessary to humour those he has, those possessed of great authority with the soldiers: a Braccio, a Sforza, a Wallenstein. He lacks money for the most pressing needs, it is necessary to turn to great financiers, who have an established credit, and he

must at the same time connive at their malversations. It is true that this unfortunate necessity arises most often from previous errors. It is not the same with God: he has need of no man, he commits no error, he always does the best. One cannot even wish that things may go better, when one understands them: and it would be a vice in the Author of things if he wished to change anything whatsoever in them, if he wished to exclude the vice that was found there. Is this State with perfect government, where good is willed and performed as far as it is possible, where evil even serves the greatest good, comparable with the State of a prince whose affairs are in ruin and who escapes as best he can? Or with that of a prince who encourages oppression in order to punish it, and who delights to see the little men with begging bowls and the great on scaffolds?

126. XI. ‘A ruler devoted to the interests of virtue, and to the good of his subjects, takes the utmost care to ensure that they never disobey his laws; and if he must needs chastise them for their disobedience, he sees to it that the penalty cures them of the inclination to evil, and restores in their soul a strong and constant tendency towards good: so far is he from any desire that the penalty for the error should incline them more and more towards evil.’

To make men better, God does all that is due, and even all that can be done on his side without detriment to what is due. The most usual aim of punishment is amendment; but it is not the sole aim, nor that which God always intends. I have said a word on that above. Original sin, which disposes men towards evil, is not merely a penalty for the first sin; it is a natural consequence thereof. On that too a word has been said, in the course of an observation on the fourth theological proposition. It is like drunkenness, which is a penalty for excess in drinking and is at the same time a natural consequence that easily leads to new sins.

127. XII. ‘To permit the evil that one could prevent is not to care whether it be committed or not, or is even to wish that it be committed.’

By no means. How many times do men permit evils which they could prevent if they turned all their efforts in that direction? But other more important cares prevent them from doing so. One will rarely resolve upon adjusting irregularities in the coinage while one is involved in a great war. And the action of an English Parliament in this direction a little before the Peace of Ryswyck will be rather praised than imitated. Can one conclude from this that the State has no anxiety about this irregularity, or even that it desires it? God has a far stronger reason, and one far more worthy of him, for tolerating evils. Not only does he derive from them greater goods, but he finds them connected with the greatest goods of all those that are possible: so that it would be a fault not to permit them.

128. XIII. ‘It is a very great fault in those who govern, if they do not care whether there be disorder in their States or not. The fault is still greater if they wish and even desire disorder there. If by hidden and indirect, but infallible, ways they stirred up a sedition in their States to bring them to the brink of ruin, in order to gain for themselves the glory of showing that they have the courage and the prudence necessary for saving a great kingdom on the point of perishing, they would be most deserving of condemnation. But if they stirred up this sedition because there were no other means than that, of averting the total ruin of their subjects and of strengthening on new foundations, and for several centuries, the happiness of nations, one must needs lament the unfortunate necessity (see above, p, 147, what has been said of the force of necessity) to which they were reduced, and praise them for the use that they made thereof.’

This maxim, with divers others set forth here, is not applicable to the government of God. Not to mention the fact that it is only the disorders of a very small part of his kingdom which are brought up in objection, it is

untrue that he has no anxiety about evils, that he desires them, that he brings them into being, to have the glory of allaying them. God wills order and good; but it happens sometimes that what is disorder in the part is order in the whole. I have already stated this legal axiom: *Incivile est nisi tota lege inspecta judicare*. The permission of evils comes from a kind of moral necessity: God is constrained to this by his wisdom and by his goodness; *this necessity is happy*, whereas that of the prince spoken of in the maxim is *unhappy*. His State is one of the most corrupt; and the government of God is the best State possible.

129. XIV. 'The permission of a certain evil is only excusable when one cannot remedy it without introducing a greater evil; but it cannot be excusable in those who have in hand a remedy more efficacious against this evil, and against all the other evils that could spring from the suppression of this one.'

The maxim is true, but it cannot be brought forward against the government of God. Supreme reason constrains him to permit the evil. If God chose what would not be the best absolutely and in all, that would be a greater evil than all the individual evils which he could prevent by this means. This wrong choice would destroy his wisdom and his goodness.

130. XV. 'The Being infinitely powerful, Creator of matter and of spirits, makes whatever he wills of this matter and these spirits. There is no situation or shape that he cannot communicate to spirits. If he then permitted a physical or a moral evil, this would not be for the reason that otherwise some other still greater physical or moral evil would be altogether inevitable. None of those reasons for the mixture of good and evil which are founded on the limitation of the forces of benefactors can apply to him.'

It is true that God makes of matter and of spirits whatever he wills; but he is like a good sculptor, who will make from his block of marble only that which he judges to be the best, and who judges well. God makes of matter

the most excellent of all possible machines; he makes of spirits the most excellent of all governments conceivable; and over and above all that, he establishes for their union the most perfect of all harmonies, according to the system I have proposed. Now since physical evil and moral evil occur in this perfect work, one must conclude (contrary to M. Bayle's assurance here) that *otherwise a still greater evil would have been altogether inevitable*. This great evil would be that God would have chosen ill if he had chosen otherwise than he has chosen. It is true that God is infinitely powerful; but his power is indeterminate, goodness and wisdom combined determine him to produce the best. M. Bayle makes elsewhere an objection which is peculiar to him, which he derives from the opinions of the modern Cartesians. They say that God could have given to souls what thoughts he would, without making them depend upon any relation to the body: by this means souls would be spared a great number of evils which only spring from derangement of the body. More will be said of this later; now it is sufficient to bear in mind that God cannot establish a system ill-connected and full of dissonances. It is to some extent the nature of souls to represent bodies.

131. XVI. 'One is just as much the cause of an event when one brings it about in moral ways, as when one brings it about in physical ways. A Minister of State, who, without going out of his study, and simply by utilizing the passions of the leaders of a faction, overthrew all their plots, would thus be bringing about the ruin of this faction, no less than if he destroyed it by a surprise attack.'

I have nothing to say against this maxim. Evil is always attributed to moral causes, and not always to physical causes. Here I observe simply that if I could not prevent the sin of others except by committing a sin myself, I should be justified in permitting it, and I should not be accessary thereto, or its moral cause. In God, every fault would represent a sin; it would be even

more than sin, for it would destroy Divinity. And it would be a great fault in him not to choose the best. I have said so many times. He would then prevent sin by something worse than all sins.

132. XVII. ‘It is all the same whether one employ a necessary cause, or employ a free cause while choosing the moments when one knows it to be determined. If I imagine that gunpowder has the power to ignite or not to ignite when fire touches it, and if I know for certain that it will be disposed to ignite at eight o’clock in the morning, I shall be just as much the cause of its effects if I apply the fire to it at that hour, as I should be in assuming, as is the case, that it is a necessary cause. For where I am concerned it would no longer be a free cause. I should be catching it at the moment when I knew it to be necessitated by its own choice. It is impossible for a being to be free or indifferent with regard to that to which it is already determined, and at the time when it is determined thereto. All that which exists exists of necessity while it exists. Το ειναι το ον ὁταν ηι, και το μη ειναι ὁταν μη ηι, αναγκη. “Necesse est id quod est, quando est, esse; et id quod non est, quando non est, non esse”: Arist. *De Interpret.* ca. The Nominalists have adopted this maxim of Aristotle. Scotus and sundry other Schoolmen appear to reject it, but fundamentally their distinctions come to the same thing. See the Jesuits of Coimbra on this passage from Aristotle, *et seq.*)’

This maxim may pass also; I would wish only to change something in the phraseology. I would not take ‘free’ and ‘indifferent’ for one and the same thing, and would not place ‘free’ and ‘determined’ in antithesis. One is never altogether indifferent with an indifference of equipoise; one is always more inclined and consequently more determined on one side than on another: but one is never necessitated to the choice that one makes. I mean here a *necessity* absolute and metaphysical; for it must be admitted that God, that wisdom, is prompted to the best by a *moral* necessity. It must be admitted also that one is necessitated to the choice by a hypothetical

necessity, when one actually makes the choice; and even before one is necessitated thereto by the very truth of the futurition, since one will do it. These hypothetical necessities do no harm. I have spoken sufficiently on this point already.

133. XVIII. ‘When a whole great people has become guilty of rebellion, it is not showing clemency to pardon the hundred thousandth part, and to kill all the rest, not excepting even babes and sucklings.’

It seems to be assumed here that there are a hundred thousand times more damned than saved, and that children dying unbaptized are included among the former. Both these points are disputed, and especially the damnation of these children. I have spoken of this above. M. Bayle urges the same objection elsewhere (*Reply to the Questions of a Provincial*, vol. III, ch. 178,): ‘We see clearly’, he says, ‘that the Sovereign who wishes to exercise both justice and clemency when a city has revolted must be content with the punishment of a small number of mutineers, and pardon all the rest. For if the number of those who are chastised is as a thousand to one, in comparison with those whom he freely pardons, he cannot be accounted mild, but, on the contrary, cruel. He would assuredly be accounted an abominable tyrant if he chose punishments of long duration, and if he eschewed bloodshed only because he was convinced that men would prefer death to a miserable life; and if, finally, the desire to take revenge were more responsible for his severities than the desire to turn to the service of the common weal the penalty that he would inflict on almost all the rebels. Criminals who are executed are considered to expiate their crimes so completely by the loss of their life, that the public requires nothing more, and is indignant when executioners are clumsy. These would be stoned if they were known deliberately to give repeated strokes of the axe; and the judges who are present at the execution would not be immune from danger if they were thought to take pleasure in this evil sport of the executioners,

and to have surreptitiously urged them to practise it.' (Note that this is not to be understood as strictly universal. There are cases where the people approve of the slow killing of certain criminals, as when Francis I thus put to death some persons accused of heresy after the notorious Placards of 1534. No pity was shown to Ravaillac, who was tortured in divers horrible ways. See the *French Mercury*, vol. I, fol. m. 455 *et seq.* See also Pierre Matthieu in his *History of the Death of Henry IV*; and do not forget what he says on page m. 99 concerning the discussion by the judges with regard to the torture of this parricide.) 'Finally it is an exceptionally notorious fact that Rulers who should be guided by St. Paul, I mean who should condemn to the extreme penalty all those whom he condemns to eternal death, would be accounted enemies of the human kind and destroyers of their communities. It is incontestable that their laws, far from being fitted, in accordance with the aim of legislators, to uphold society, would be its complete ruin. (Apply here these words of Pliny the Younger, *Epist.* 22, lib. 8: Mandemus memoriae quod vir mitissimus, et ob hoc quoque maximus, Thrasea crebro dicere solebat, Qui vitia odit, homines odit.)' He adds that it was said of the laws of Draco, an Athenian lawgiver, that they had not been written with ink, but with blood, because they punished all sins with the extreme penalty, and because damnation is a penalty even worse than death. But it must be borne in mind that damnation is a consequence of sin. Thus I once answered a friend, who raised as an objection the disproportion existing between an eternal punishment and a limited crime, that there is no injustice when the continuation of the punishment is only a result of the continuation of the sin. I will speak further on this point later. As for the number of the damned, even though it should be incomparably greater among men than the number of the saved, that would not preclude the possibility that in the universe the happy creatures infinitely outnumber those who are unhappy. Such examples as that of a prince who punishes

only the leaders of rebels or of a general who has a regiment decimated, are of no importance here. Self-interest compels the prince and the general to pardon the guilty, even though they should remain wicked. God only pardons those who become better: he can distinguish them; and this severity is more consistent with perfect justice. But if anyone asks why God gives not to all the grace of conversion, the question is of a different nature, having no relation to the present maxim. I have already answered it in a sense, not in order to find God's reasons, but to show that he cannot lack such, and that there are no opposing reasons of any validity. Moreover, we know that sometimes whole cities are destroyed and the inhabitants put to the sword, to inspire terror in the rest. That may serve to shorten a great war or a rebellion, and would mean a saving of blood through the shedding of it: there is no decimation there. We cannot assert, indeed, that the wicked of our globe are punished so severely in order to intimidate the inhabitants of the other globes and to make them better. Yet an abundance of reasons in the universal harmony which are unknown to us, because we know not sufficiently the extent of the city of God, nor the form of the general republic of spirits, nor even the whole architecture of bodies, may produce the same effect.

134. XIX. 'Those physicians who chose, among many remedies capable of curing a sick man, whereof divers were such as they well knew he would take with enjoyment, precisely that one which they knew he would refuse to take, would vainly urge and pray him not to refuse it; we should still have just cause for thinking that they had no desire to cure him: for if they wished to do so, they would choose for him among those good medicines one which they knew he would willingly swallow. If, moreover, they knew that rejection of the remedy they offered him would augment his sickness to the point of making it fatal, one could not help saying that, despite all their exhortations, they must certainly be desirous of the sick man's death.'

God wishes to save all men: that means that he would save them if men themselves did not prevent it, and did not refuse to receive his grace; and he is not bound or prompted by reason always to overcome their evil will. He does so sometimes nevertheless, when superior reasons allow of it, and when his consequent and decretory will, which results from all his reasons, makes him resolve upon the election of a certain number of men. He gives aids to all for their conversion and for perseverance, and these aids suffice in those who have good will, but they do not always suffice to give good will. Men obtain this good will either through particular aids or through circumstances which cause the success of the general aids. God cannot refrain from offering other remedies which he knows men will reject, bringing upon themselves all the greater guilt: but shall one wish that God be unjust in order that man may be less criminal? Moreover, the grace that does not serve the one may serve the other, and indeed always serves the totality of God's plan, which is the best possible in conception. Shall God not give the rain, because there are low-lying places which will be thereby incommoded? Shall the sun not shine as much as it should for the world in general, because there are places which will be too much dried up in consequence? In short, all these comparisons, spoken of in these maxims that M. Bayle has just given, of a physician, a benefactor, a minister of State, a prince, are exceedingly lame, because it is well known what their duties are and what can and ought to be the object of their cares: they have scarce more than the one affair, and they often fail therein through negligence or malice. God's object has in it something infinite, his cares embrace the universe: what we know thereof is almost nothing, and we desire to gauge his wisdom and his goodness by our knowledge. What temerity, or rather what absurdity! The objections are on false assumptions; it is senseless to pass judgement on the point of law when one does not know the matter of fact. To say with St. Paul, *O altitudo divitiarum et*

sapientiae, is not renouncing reason, it is rather employing the reasons that we know, for they teach us that immensity of God whereof the Apostle speaks. But therein we confess our ignorance of the facts, and we acknowledge, moreover, before we see it, that God does all the best possible, in accordance with the infinite wisdom which guides his actions. It is true that we have already before our eyes proofs and tests of this, when we see something entire, some whole complete in itself, and isolated, so to speak, among the works of God. Such a whole, shaped as it were by the hand of God, is a plant, an animal, a man. We cannot wonder enough at the beauty and the contrivance of its structure. But when we see some broken bone, some piece of animal's flesh, some sprig of a plant, there appears to be nothing but confusion, unless an excellent anatomist observe it: and even he would recognize nothing therein if he had not before seen like pieces attached to their whole. It is the same with the government of God: that which we have been able to see hitherto is not a large enough piece for recognition of the beauty and the order of the whole. Thus the very nature of things implies that this order in the Divine City, which we see not yet here on earth, should be an object of our faith, of our hope, of our confidence in God. If there are any who think otherwise, so much the worse for them, they are malcontents in the State of the greatest and the best of all monarchs; and they are wrong not to take advantage of the examples he has given them of his wisdom and his infinite goodness, whereby he reveals himself as being not only wonderful, but also worthy of love beyond all things.

135. I hope it will be found that nothing of what is comprised in the nineteen maxims of M. Bayle, which we have just considered, has been left without a necessary answer. It is likely that, having often before meditated on this subject, he will have put there all his strongest convictions touching the moral cause of moral evil. There are, however, still sundry passages

here and there in his works which it will be well not to pass over in silence. Very often he exaggerates the difficulty which he assumes with regard to freeing God from the imputation of sin. He observes *(Reply to the Questions of a Provincial*, ch. 161,) that Molina, if he reconciled free will with foreknowledge, did not reconcile the goodness and the holiness of God with sin. He praises the sincerity of those who bluntly declare (as he claims Piscator did) that everything is to be traced back to the will of God, and who maintain that God could not but be just, even though he were the author of sin, even though he condemned innocence. And on the other side, or in other passages, he seems to show more approval of the opinions of those who preserve God's goodness at the expense of his greatness, as Plutarch does in his book against the Stoics. 'It was more reasonable', he says, 'to say' (with the Epicureans) 'that innumerable parts' (or atoms flying about at haphazard through an infinite space) 'by their force prevailed over the weakness of Jupiter and, in spite of him and against his nature and will, did many bad and irrational things, than to agree that there is neither confusion nor wickedness but he is the author thereof.' What may be said for both these parties, Stoics and Epicureans, appears to have led M. Bayle to the επεχειν of the Pyrrhonians, the suspension of his judgement in respect of reason, so long as faith is set apart; and to that he professes sincere submission.

136. Pursuing his arguments, however, he has gone as far as attempting almost to revive and reinforce those of the disciples of Manes, a Persian heretic of the third century after Christ, or of a certain Paul, chief of the Manichaeans in Armenia in the seventh century, from whom they were named Paulicians. All these heretics renewed what an ancient philosopher of Upper Asia, known under the name of Zoroaster, had taught, so it is said, of two intelligent principles of all things, the one good, the other bad, a dogma that had perhaps come from the Indians. Among them numbers of

people still cling to their error, one that is exceedingly prone to overtake human ignorance and superstition, since very many barbarous peoples, even in America, have been deluded by it, without having had need of philosophy. The Slavs (according to Helmold) had their Zernebog or black God. The Greeks and Romans, wise as they seem to be, had a Vejovis or Anti-Jupiter, otherwise called Pluto, and numerous other maleficent divinities. The Goddess Nemesis took pleasure in abasing those who were too fortunate; and Herodotus in some passages hints at his belief that all Divinity is envious; which, however, is not in harmony with the doctrine of the two principles.

137. Plutarch, in his treatise *On Isis and Osiris*, knows of no writer more ancient than Zoroaster the magician, as he calls him, that is likely to have taught the two principles. Trogus or Justin makes him a King of the Bactrians, who was conquered by Ninus or Semiramis; he attributes to him the knowledge of astronomy and the invention of magic. But this magic was apparently the religion of the fire-worshippers: and it appears that he looked upon light and heat as the good principle, while he added the evil, that is to say, opacity, darkness, cold. Pliny cites the testimony of a certain Hermippus, an interpreter of Zoroaster's books, according to whom Zoroaster was a disciple in the art of magic to one named Azonacus; unless indeed this be a corruption of Oromases, of whom I shall speak presently, and whom Plato in the *Alcibiades* names as the father of Zoroaster. Modern Orientals give the name Zerdust to him whom the Greeks named Zoroaster; he is regarded as corresponding to Mercury, because with some nations Wednesday *(mercredi)* takes its name from him. It is difficult to disentangle the story of Zoroaster and know exactly when he lived. Suidas puts him five hundred years before the taking of Troy. Some Ancients cited by Pliny and Plutarch took it to be ten times as far back. But Xanthus the Lydian (in the preface to Diogenes Laertius) put him only six hundred years before the

expedition of Xerxes. Plato declares in the same passage, as M. Bayle observes, that the magic of Zoroaster was nothing but the study of religion. Mr. Hyde in his book on the religion of the ancient Persians tries to justify this magic, and to clear it not only of the crime of impiety but also of idolatry. Fire-worship prevailed among the Persians and the Chaldaeans also; it is thought that Abraham left it when he departed from Ur of the Chaldees. Mithras was the sun and he was also the God of the Persians; and according to Ovid's account horses were offered in sacrifice to him,

Placat equo Persis radiis Hyperiona cinctum,
Ne detur celeri victima tarda Deo.

But Mr. Hyde believes that they only made use of the sun and fire in their worship as symbols of the Divinity. It may be necessary to distinguish, as elsewhere, between the Wise and the Multitude. There are in the splendid ruins of Persepolis or of Tschelminaar (which means forty columns) sculptured representations of their ceremonies. An ambassador of Holland had had them sketched at very great cost by a painter, who had devoted a considerable time to the task: but by some chance or other these sketches fell into the hands of a well-known traveller, M. Chardin, according to what he tells us himself. It would be a pity if they were lost. These ruins are one of the most ancient and most beautiful monuments of the earth; and in this respect I wonder at such lack of curiosity in a century so curious as ours.

138. The ancient Greeks and the modern Orientals agree in saying that Zoroaster called the good God Oromazes, or rather Oromasdes, and the evil God Arimanius. When I pondered on the fact that great princes of Upper Asia had the name of Hormisdas and that Irminius or Herminius was the name of a god or ancient hero of the Scythian Celts, that is, of the Germani, it occurred to me that this Arimanius or Irminius might have been a great conqueror of very ancient time coming from the west, just as Genghis Khan

and Tamburlaine were later, coming from the east. Arimanius would therefore have come from the north-west, that is, from Germania and Sarmatia, through the territory of the Alani and Massagetae, to raid the dominions of one Ormisdas, a great king in Upper Asia, just as other Scythians did in the days of Cyaxares, King of the Medes, according to the account given by Herodotus. The monarch governing civilized peoples, and working to defend them against the barbarians, would have gone down to posterity, amongst the same peoples, as the good god; but the chief of these devastators will have become the symbol of the evil principle: that is altogether reasonable. It appears from this same mythology that these two princes contended for long, but that neither of them was victorious. Thus they both held their own, just as the two principles shared the empire of the world according to the hypothesis attributed to Zoroaster.

139. It remains to be proved that an ancient god or hero of the Germani was called Herman, Arimanius or Irminius. Tacitus relates that the three tribes which composed Germania, the Ingaevones, the Istaevones and the Herminones or Hermiones, were thus named from the three sons of Mannus. Whether that be true or not, he wished in any case to indicate that there was a hero named Herminius, from whom he was told the Herminones were named. Herminones, Hermenner, Hermunduri all mean the same, that is, Soldiers. Even in the Dark Ages Arimanni were *viri militares,* and there is *feudum Arimandiae* in Lombard law.

140. I have shown elsewhere that apparently the name of one part of Germania was given to the whole, and that from these Herminones or Hermunduri all the Teutonic peoples were named *Hermanni* or *Germani*. The difference between these two words is only in the force of the aspiration: there is the same difference of initial letter between the *Germani* of the Latins and *Hermanos* of the Spaniards, or in the *Gammarus* of the Latins and the *Hummer* (that is, marine crayfish) of the Low Germans.

Besides it is very usual for one part of a nation to give the name to the whole: so all the Germani were called Alemanni by the French, and yet this, according to the old nomenclature, only applied to the Suabians and the Swiss. Although Tacitus did not actually know the origin of the name of the Germani, he said something which supports my opinion, when he observed that it was a name which inspired terror, taken or given *ob metum*. In fact it signifies a warrior: *Heer*, *Hari* is army, whence comes *Hariban*, or 'call to Haro', that is, a general order to be with the army, since corrupted into *Arrièreban*. Thus Hariman or Ariman, German *Guerre-man*, is a soldier. For as *Hari*, *Heer* means army, so *Wehr* signifies arms, *Wehren* to fight, to make war, the word *Guerre*, *Guerra* coming doubtless from the same source. I have already spoken of the *feudum Arimandiae*: not only did Herminones or Germani signify the same, but also that ancient Herman, so-called son of Mannus, appears to have been given this name as being pre-eminently a warrior.

141. Now it is not the passage in Tacitus only which indicates for us this god or hero: we cannot doubt the existence of one of this name among these peoples, since Charlemagne found and destroyed near the Weser the column called *Irminsäule*, erected in honour of this god. And that combined with the passage in Tacitus leaves us with the conclusion that it was not that famous Arminius who was an enemy of the Romans, but a much greater and more ancient hero, that this cult concerned. Arminius bore the same name as those who are called Hermann to-day. Arminius was not great enough, nor fortunate enough, nor well enough known throughout Germania to attain to the honour of a public cult, even at the hands of remote tribes, like the Saxons, who came long after him into the country of the Cherusci. And our Arminius, taken by the Asiatics for the evil God, provides ample confirmation of my opinion. For in these matters

conjectures confirm one another without any logical circle, when their foundations tend towards one and the same end.

142. It is not beyond belief that the Hermes (that is, Mercury) of the Greeks is the same Herminius or Arimanius. He may have been an inventor or promoter of the arts and of a slightly more civilized life among his own people and in the countries where he held supremacy, while amongst his enemies he was looked upon as the author of confusion. Who knows but that he may have penetrated even into Egypt, like the Scythians who in pursuit of Sesostris came nearly so far. Theut, Menes and Hermes were known and revered in Egypt. They might have been Tuiscon, his son Mannus and Herman, son of Mannus, according to the genealogy of Tacitus. Menes is held to be the most ancient king of the Egyptians; 'Theut' was with them a name for Mercury. At least Theut or Tuiscon, from whom Tacitus derives the descent of the Germani, and from whom the Teutons, *Tuitsche* (that is, Germani) even to-day have their name, is the same as that *Teutates* who according to Lucan was worshipped by the Gauls, and whom Caesar took *pro Dite Patre*, for Pluto, because of the resemblance between his Latin name and that of *Teut* or *Thiet*, *Titan*, *Theodon*; this in ancient times signified men, people, and also an excellent man (like the word 'baron'), in short, a prince. There are authorities for all these significations: but one must not delay over this point. Herr Otto Sperling, who is well known for various learned writings, but has many more in readiness to appear, in a special dissertation has treated the question of this Teutates, God of the Celts. Some observations which I imparted to him on that subject have been published, with his reply, in the *Literary News of the Baltic Sea*. He interprets this passage from Lucan somewhat otherwise than I do:

Teutates, pollensque feris altaribus Hesus,
Et Tamaris Scythicae non mitior ara Dianae.

Hesus was, it appears, the God of War, who was called Ares by the Greeks and Erich by the ancient Germani, whence still remains *Erichtag*, Tuesday. The letters R and S, which are produced by the same organ, are easily interchanged, for instance: *Moor* and *Moos*, *Geren* and *Gesen*, *Er war* and *Er was*, *Fer*, *Hierro*, *Eiron*, *Eisen*. Likewise *Papisius*, *Valesius*, *Fusius*, instead of *Papirius*, *Valerius*, *Furius*, with the ancient Romans. As for Taramis or perhaps Taranis, one knows that *Taran* was the thunder, or the God of Thunder, with the ancient Celts, called *Thor* by the Germani of the north; whence the English have preserved the name 'Thursday', *jeudi*, *diem Jovis*. And the passage from Lucan means that the altar of Taran, God of the Celts, was not less cruel than that of Diana in Tauris: *Taranis aram non mitiorem ara Dianae Scythicae fuisse*.

143. It is also not impossible that there was a time when the western or Celtic princes made themselves masters of Greece, of Egypt and a good part of Asia, and that their cult remained in those countries. When one considers with what rapidity the Huns, the Saracens and the Tartars gained possession of a great part of our continent one will be the less surprised at this; and it is confirmed by the great number of words in the Greek and German tongues which correspond so closely. Callimachus, in a hymn in honour of Apollo, seems to imply that the Celts who attacked the Temple at Delphi, under their Brennus, or chief, were descendants of the ancient Titans and Giants who made war on Jupiter and the other gods, that is to say, on the Princes of Asia and of Greece. It may be that Jupiter is himself descended from the Titans or Theodons, that is, from the earlier Celto-Scythian princes; and the material collected by the late Abbé de la Charmoye in his *Celtic Origins* conforms to that possibility. Yet there are opinions on other matters in this work by this learned writer which to me do not appear probable, especially when he excludes the Germani from the number of the Celts, not having recalled sufficiently the facts given by ancient writers and not being

sufficiently aware of the relation between the ancient Gallic and Germanic tongues. Now the so-called Giants, who wished to scale the heavens, were new Celts who followed the path of their ancestors; and Jupiter, although of their kindred, as it were, was constrained to resist them. Just so did the Visigoths established in Gallic territory resist, together with the Romans, other peoples of Germania and Scythia, who succeeded them under Attila their leader, he being at that time in control of the Scythian, Sarmatic and Germanic tribes from the frontiers of Persia up to the Rhine. But the pleasure one feels when one thinks to find in the mythologies of the gods some trace of the old history of fabulous times has perhaps carried me too far, and I know not whether I shall have been any more successful than Goropius Becanus, Schrieckius, Herr Rudbeck and the Abbe de la Charmoye.

144. Let us return to Zoroaster, who led us to Oromasdes and Arimanius, the sources of good and evil, and let us assume that he looked upon them as two eternal principles opposed to each other, although there is reason to doubt this assumption. It is thought that Marcion, disciple of Cerdon, was of this opinion before Manes. M. Bayle acknowledges that these men used lamentable arguments; but he thinks that they did not sufficiently recognize their advantages or know how to apply their principal instrument, which was the difficulty over the origin of evil. He believes that an able man on their side would have thoroughly embarrassed the orthodox, and it seems as though he himself, failing any other, wished to undertake a task so unnecessary in the opinion of many people. ‘All the hypotheses’ (he says, *Dictionary*, v. ‘Marcion’,) ‘that Christians have established parry but poorly the blows aimed at them: they all triumph when they act on the offensive; but they lose their whole advantage when they have to sustain the attack.’ He confesses that the ‘Dualists’ (as with Mr. Hyde he calls them), that is, the champions of two principles, would soon have been routed by *a*

priori reasons, taken from the nature of God; but he thinks that they triumph in their turn when one comes to the *a posteriori* reasons, which are taken from the existence of evil.

145. He treats of the matter with abundant detail in his *Dictionary*, article ‘Manichaeans’,, which we must examine a little, in order to throw greater light upon this subject: ‘The surest and clearest ideas of order teach us’, he says, ‘that a Being who exists through himself, who is necessary, who is eternal, must be single, infinite, all powerful, and endowed with all kinds of perfections.’ This argument deserves to have been developed more completely. ‘Now it is necessary to see’, he goes on, ‘if the phenomena of nature can be conveniently explained by the hypothesis of one single principle.’ I have explained it sufficiently by showing that there are cases where some disorder in the part is necessary for producing the greatest order in the whole. But it appears that M. Bayle asks a little too much: he wishes for a detailed exposition of how evil is connected with the best possible scheme for the universe. That would be a complete explanation of the phenomena: but I do not undertake to give it; nor am I bound to do so, for there is no obligation to do that which is impossible for us in our existing state. It is sufficient for me to point out that there is nothing to prevent the connexion of a certain individual evil with what is the best on the whole. This incomplete explanation, leaving something to be discovered in the life to come, is sufficient for answering the objections, though not for a comprehension of the matter.

146. ‘The heavens and all the rest of the universe’, adds M. Bayle, ‘preach the glory, the power, the oneness of God.’ Thence the conclusion should have been drawn that this is the case (as I have already observed above) because there is seen in these objects something entire and isolated, so to speak. Every time we see such a work of God, we find it so perfect that we must wonder at the contrivance and the beauty thereof: but when we

do not see an entire work, when we only look upon scraps and fragments, it is no wonder if the good order is not evident there. Our planetary system composes such an isolated work, which is complete also when it is taken by itself; each plant, each animal, each man furnishes one such work, to a certain point of perfection: one recognizes therein the wonderful contrivance of the author. But the human kind, so far as it is known to us, is only a fragment, only a small portion of the City of God or of the republic of Spirits, which has an extent too great for us, and whereof we know too little, to be able to observe the wonderful order therein. 'Man alone,' says M. Bayle, 'that masterpiece of his Creator among things visible, man alone, I say, gives rise to great objections with regard to the oneness of God.' Claudian made the same observation, unburdening his heart in these well-known lines:

Saepe mihi dubiam traxit sententia mentem, etc.

But the harmony existing in all the rest allows of a strong presumption that it would exist also in the government of men, and generally in that of Spirits, if the whole were known to us. One must judge the works of God as wisely as Socrates judged those of Heraclitus in these words: What I have understood thereof pleases me; I think that the rest would please me no less if I understood it.

147. Here is another particular reason for the disorder apparent in that which concerns man. It is that God, in giving him intelligence, has presented him with an image of the Divinity. He leaves him to himself, in a sense, in his small department, *ut Spartam quam nactus est ornet*. He enters there only in a secret way, for he supplies being, force, life, reason, without showing himself. It is there that free will plays its game: and God makes game (so to speak) of these little Gods that he has thought good to produce, as we make game of children who follow pursuits which we secretly encourage or hinder according as it pleases us. Thus man is there like a little

god in his own world or *Microcosm*, which he governs after his own fashion: he sometimes performs wonders therein, and his art often imitates nature.

Jupiter in parvo cum cerneret aethera vitro,
Risit et ad Superos talia dicta dedit:
Huccine mortalis progressa potentia, Divi?
Jam meus in fragili luditur orbe labor.
Jura poli rerumque fidem legesque Deorum
Cuncta Syracusius transtulit arte Senex.
Quid falso insontem tonitru Salmonea miror?
Aemula Naturae est parva reperta manus.

But he also commits great errors, because he abandons himself to the passions, and because God abandons him to his own way. God punishes him also for such errors, now like a father or tutor, training or chastising children, now like a just judge, punishing those who forsake him: and evil comes to pass most frequently when these intelligences or their small worlds come into collision. Man finds himself the worse for this, in proportion to his fault; but God, by a wonderful art, turns all the errors of these little worlds to the greater adornment of his great world. It is as in those devices of perspective, where certain beautiful designs look like mere confusion until one restores them to the right angle of vision or one views them by means of a certain glass or mirror. It is by placing and using them properly that one makes them serve as adornment for a room. Thus the apparent deformities of our little worlds combine to become beauties in the great world, and have nothing in them which is opposed to the oneness of an infinitely perfect universal principle: on the contrary, they increase our wonder at the wisdom of him who makes evil serve the greater good.

148. M. Bayle continues: ‘that man is wicked and miserable; that there are everywhere prisons and hospitals; that history is simply a collection of

the crimes and calamities of the human race.' I think that there is exaggeration in that: there is incomparably more good than evil in the life of men, as there are incomparably more houses than prisons. With regard to virtue and vice, a certain mediocrity prevails. Machiavelli has already observed that there are few very wicked and very good men, and that this causes the failure of many great enterprises. I find it a great fault in historians that they keep their mind on the evil more than on the good. The chief end of history, as also of poetry, should be to teach prudence and virtue by examples, and then to display vice in such a way as to create aversion to it and to prompt men to avoid it, or serve towards that end.

149. M. Bayle avows: 'that one finds everywhere both moral good and physical good, some examples of virtue, some examples of happiness, and that this is what makes the difficulty. For if there were only wicked and unhappy people', he says, 'there would be no need to resort to the hypothesis of the two principles.' I wonder that this admirable man could have evinced so great an inclination towards this opinion of the two principles; and I am surprised at his not having taken into account that this romance of human life, which makes the universal history of the human race, lay fully devised in the divine understanding, with innumerable others, and that the will of God only decreed its existence because this sequence of events was to be most in keeping with the rest of things, to bring forth the best result. And these apparent faults in the whole world, these spots on a Sun whereof ours is but a ray, rather enhance its beauty than diminish it, contributing towards that end by obtaining a greater good. There are in truth two principles, but they are both in God, to wit, his understanding and his will. The understanding furnishes the principle of evil, without being sullied by it, without being evil; it represents natures as they exist in the eternal verities; it contains within it the reason wherefore evil is permitted: but the will tends only towards good. Let us add a third principle, namely power; it

precedes even understanding and will, but it operates as the one displays it and as the other requires it.

150. Some (like Campanella) have called these three perfections of God the three primordialities. Many have even believed that there was therein a secret connexion with the Holy Trinity: that power relates to the Father, that is, to the source of Divinity, wisdom to the Eternal Word, which is called *logos* by the most sublime of the Evangelists, and will or Love to the Holy Spirit. Well-nigh all the expressions or comparisons derived from the nature of the intelligent substance tend that way.

151. It seems to me that if M. Bayle had taken into account what I have just said of the principles of things, he would have answered his own questions, or at the least he would not have continued to ask, as he does in these which follow: 'If man is the work of a single principle supremely good, supremely holy, supremely powerful, can he be subject to diseases, to cold, heat, hunger, thirst, pain, grief? Can he have so many evil tendencies? Can he commit so many crimes? Can supreme goodness produce an unhappy creature? Shall not supreme power, united to an infinite goodness, shower blessings upon its work, and shall it not banish all that might offend or grieve?' Prudentius in his *Hamartigenia* presented the same difficulty:

Si non vult Deus esse malum, cur non vetat? inquit.
Non refert auctor fuerit, factorve malorum.
Anne opera in vitium sceleris pulcherrima verti,
Cum possit prohibere, sinat; quod si velit omnes
Innocuos agere Omnipotens, ne sancta voluntas
Degeneret, facto nec se manus inquinet ullo?
Condidit ergo malum Dominus, quod spectat ab alto,
Et patitur fierique probat, tanquam ipse crearit.
Ipse creavit enim, quod si discludere possit,
Non abolet, longoque sinit grassarier usu.

But I have already answered that sufficiently. Man is himself the source of his evils: just as he is, he was in the divine idea. God, prompted by essential reasons of wisdom, decreed that he should pass into existence just as he is. M. Bayle would perchance have perceived this origin of evil in the form in which I demonstrate it here, if he had herein combined the wisdom of God with his power, his goodness and his holiness. I will add, in passing, that his *holiness* is nothing other than the highest degree of goodness, just as the crime which is its opposite is the worst of all evil.

152. M. Bayle places the Greek philosopher Melissus, champion of the oneness of the first principle (and perhaps even of the oneness of substance) in conflict with Zoroaster, as with the first originator of duality. Zoroaster admits that the hypothesis of Melissus is more consistent with order and *a priori* reasons, but he denies its conformity with experience and *a posteriori* reasons. 'I surpass you', he said, 'in the explanation of phenomena, which is the principal mark of a good system.' But, in my opinion, it is not a very good explanation of a phenomenon to assign to it an *ad hoc* principle: to evil, a *principium maleficum*, to cold, a *primum frigidum*; there is nothing so easy and nothing so dull. It is well-nigh as if someone were to say that the Peripatetics surpass the new mathematicians in the explanation of the phenomena of the stars, by giving them *ad hoc* intelligences to guide them. According to that, it is quite easy to conceive why the planets make their way with such precision; whereas there is need of much geometry and reflexion to understand how from the gravity of the planets, which bears them towards the sun, combined with some whirlwind which carries them along, or with their own motive force, can spring the elliptic movement of Kepler, which satisfies appearances so well. A man incapable of relishing deep speculations will at first applaud the Peripatetics and will treat our mathematicians as dreamers. Some old Galenist will do the same with regard to the faculties of the Schoolmen: he will admit a chylific, a chymific

and a sanguific, and he will assign one of these *ad hoc* to each operation; he will think he has worked wonders, and will laugh at what he will call the chimeras of the moderns, who claim to explain through mechanical structure what passes in the body of an animal.

153. The explanation of the cause of evil by a particular principle, *per principium maleficum*, is of the same nature. Evil needs no such explanation, any more than do cold and darkness: there is neither *primum frigidum* nor principle of darkness. Evil itself comes only from privation; the positive enters therein only by concomitance, as the active enters by concomitance into cold. We see that water in freezing is capable of breaking a gun-barrel wherein it is confined; and yet cold is a certain privation of force, it only comes from the diminution of a movement which separates the particles of fluids. When this separating motion becomes weakened in the water by the cold, the particles of compressed air concealed in the water collect; and, becoming larger, they become more capable of acting outwards through their buoyancy. The resistance which the surfaces of the proportions of air meet in the water, and which opposes the force exerted by these portions towards dilation, is far less, and consequently the effect of the air greater, in large air-bubbles than in small, even though these small bubbles combined should form as great a mass as the large. For the resistances, that is, the surfaces, increase by the *square*, and the forces, that is, the contents or the volumes of the spheres of compressed air, increase by the *cube*, of their diameters. Thus it is *by accident* that privation involves action and force. I have already shown how privation is enough to cause error and malice, and how God is prompted to permit them, despite that there be no malignity in him. Evil comes from privation; the positive and action spring from it by accident, as force springs from cold.

154. The statement that M. Bayle attributes to the Paulicians,, is not conclusive, to wit, that free will must come from two principles, to the end

that it may have power to turn towards good and towards evil: for, being simple in itself, it should rather have come from a neutral principle if this argument held good. But free will tends towards good, and if it meets with evil it is by accident, for the reason that this evil is concealed beneath the good, and masked, as it were. These words which Ovid ascribes to Medea,

Video meliora proboque,

Deteriora sequor,

imply that the morally good is mastered by the agreeably good, which makes more impression on souls when they are disturbed by the passions.

155. Furthermore, M. Bayle himself supplies Melissus with a good answer; but a little later he disputes it. Here are his words,: 'If Melissus consults the notions of order, he will answer that man was not wicked when God made him; he will say that man received from God a happy state, but that not having followed the light of conscience, which in accordance with the intention of its author should have guided him along the path of virtue, he has become wicked, and has deserved that God the supremely good should make him feel the effects of his anger. It is therefore not God who is the cause of moral evil: but he is the cause of physical evil, that is, of the punishment of moral evil. And this punishment, far from being incompatible with the supremely good principle, of necessity emanates from that one of its attributes, I mean its justice, which is not less essential to it than its goodness. This answer, the most reasonable that Melissus can give, is fundamentally good and sound, but it may be disputed by something more specious and more dazzling. For indeed Zoroaster objects that the infinitely good principle ought to have created man not only without actual evil, but also without the inclination towards evil; that God, having foreseen sin with all its consequences, ought to have prevented it; that he ought to have impelled man to moral good, and not to have allowed him any force for tending towards crime.' That is quite easy to say, but it is not

practicable if one follows the principles of order: it could not have been accomplished without perpetual miracles. Ignorance, error and malice follow one another naturally in animals made as we are: should this species, then, have been missing in the universe? I have no doubt but that it is too important there, despite all its weaknesses, for God to have consented to its abolition.

156. M. Bayle, in the article entitled ‘Paulicians’ inserted by him in his *Dictionary*, follows up the pronouncements he made in the article on the Manichaeans. According to him (, lit. H) the orthodox seem to admit two first principles, in making the devil the originator of sin. M. Becker, a former minister of Amsterdam, author of the book entitled *The World Bewitched*, has made use of this idea in order to demonstrate that one should not assign such power and authority to the Devil as would allow of his comparison with God. Therein he is right: but he pushes the conclusions too far. And the author of the book entitled Αποκαταστασις Παντων believes that if the Devil had never been vanquished and despoiled, if he had always kept his prey, if the title of invincible had belonged to him, that would have done injury to the glory of God. But it is a poor advantage to keep those whom one has led astray in order to share their punishment for ever. And as for the cause of evil, it is true that the Devil is the author of sin. But the origin of sin comes from farther away, its source is in the original imperfection of creatures: that renders them capable of sinning, and there are circumstances in the sequence of things which cause this power to evince itself in action.

157. The devils were angels like the rest before their fall, and it is thought that their leader was one of the chief among angels; but Scripture is not explicit enough on that point. The passage of the Apocalypse that speaks of the struggle with the Dragon, as of a vision, leaves much in doubt, and does not sufficiently develop a subject which by the other sacred

writers is hardly mentioned. It is not in place here to enter into this discussion, and one must still admit that the common opinion agrees best with the sacred text. M. Bayle examines some replies of St. Basil, of Lactantius and others on the origin of evil. As, however, they are concerned with physical evil, I postpone discussion thereof, and I will proceed with the examination of the difficulties over the moral cause of moral evil, which arise in several passages of the works of our gifted author.

158. He disputes the *permission* of this evil, he would wish one to admit that God *wills* it. He quotes these words of Calvin (on Genesis, ch. 3): 'The ears of some are offended when one says that God willed it. But I ask you, what else is the permission of him who is entitled to forbid, or rather who has the thing in his own hands, but an act of will?' M. Bayle explains these words of Calvin, and those which precede them, as if he admitted that God willed the fall of Adam, not in so far as it was a crime, but under some other conception that is unknown to us. He quotes casuists who are somewhat lax, who say that a son can desire the death of his father, not in so far as it is an evil for himself but in so far as it is a good for his heirs *(Reply to the Questions of a Provincial*, ch. 147,). It seems to me that Calvin only says that God willed man's fall for some reason unknown to us. In the main, when it is a question of a decisive will, that is, of a decree, these distinctions are useless: one wills the action with all its qualities, if it is true that one wills it. But when it is a crime, God can only will the permission of it: the crime is neither an end nor a means, it is only a *conditio sine qua non*; thus it is not the object of a direct will, as I have already demonstrated above. God cannot prevent it without acting against what he owes to himself, without doing something that would be worse than the crime of man, without violating the rule of the best; and that would be to destroy divinity, as I have already observed. God is therefore bound by a moral necessity,

which is in himself, to permit moral evil in creatures. There is precisely the case wherein the will of a wise mind is only permissive. I have already said this: he is bound to permit the crime of others when he cannot prevent it without himself failing in that which he owes to himself.

159. ‘But among all these infinite combinations’, says M. Bayle (), ‘it pleased God to choose one wherein Adam was to sin, and by his decree he made it, in preference to all the others, the plan that should come to pass.’ Very good; that is speaking my language; so long as one applies it to the combinations which compose the whole universe. ‘You will therefore never make us understand’, he adds, ‘how God did not will that Eve and Adam should sin, since he rejected all the combinations wherein they would not have sinned.’ But the thing is in general very easy to understand, from all that I have just said. This combination that makes the whole universe is the best; God therefore could not refrain from choosing it without incurring a lapse, and rather than incur such, a thing altogether inappropriate to him, he permits the lapse or the sin of man which is involved in this combination.

160. M. Jacquelot, with other able men, does not differ in opinion from me, when for example he says, of his treatise on the *Conformity of Faith with Reason*: ‘Those who are puzzled by these difficulties seem to be too limited in their outlook, and to wish to reduce all God’s designs to their own interests. When God formed the universe, his whole prospect was himself and his own glory, so that if we had knowledge of all creatures, of their diverse combinations and of their different relations, we should understand without difficulty that the universe corresponds perfectly to the infinite wisdom of the Almighty.’ He says elsewhere (): ‘Supposing the impossible, that God could not prevent the wrong use of free will without destroying it, it will be agreed that since his wisdom and his glory determined him to form free creatures this powerful reason must have prevailed over the grievous consequences which their freedom might have.’ I have

endeavoured to develop this still further through *the reason of the best and the moral necessity* which led God to make this choice, despite the sin of some creatures which is involved therein. I think that I have cut down to the root of the difficulty; nevertheless I am well pleased, for the sake of throwing more light on the matter, to apply my principle of solution to the peculiar difficulties of M. Bayle.

161. Here is one, set forth in these terms (ch. 148,): ‘Would it in a prince be a mark of his kindness: 1. To give to a hundred messengers as much money as is needed for a journey of two hundred leagues? 2. To promise a recompense to all those who should finish the journey without having borrowed anything, and to threaten with imprisonment all those whom their money should not have sufficed? 3. To make choice of a hundred persons, of whom he would know for certain that there were but two who should earn the recompense, the ninety-eight others being destined to find on the way either a mistress or a gamester or some other thing which would make them incur expenses, and which he would himself have been at pains to dispose in certain places along their path? 4. To imprison actually ninety-eight of these messengers on the moment of their return? Is it not abundantly evident that he would have no kindness for them, and that on the contrary he would intend for them, not the proposed recompense, but prison? They would deserve it, certainly; but he who had wished them to deserve it and placed them in the sure way towards deserving it, should he be worthy of being called kind, on the pretext that he had recompensed the two others?’ It would doubtless not be on that account that he earned the title of ‘kind’. Yet other circumstances may contribute, which would avail to render him worthy of praise for having employed this artifice in order to know those people, and to make trial of them; just as Gideon made use of some extraordinary means of choosing the most valiant and the least squeamish among his soldiers. And even if the prince were to know already

the disposition of all these messengers, may he not put them to this test in order to make them known also to the others? Even though these reasons be not applicable to God, they make it clear, nevertheless, that an action like that of this prince may appear preposterous when it is detached from the circumstances indicating its cause. All the more must one deem that God has acted well, and that we should see this if we fully knew of all that he has done.

162. M. Descartes, in a letter to the Princess Elizabeth (vol. 1, letter 10) has made use of another comparison to reconcile human freedom with the omnipotence of God. 'He imagines a monarch who has forbidden duels, and who, knowing for certain that two noblemen, if they meet, will fight, takes sure steps to bring about their meeting. They meet indeed, they fight: their disobedience of the law is an effect of their free will, they are punishable. What a king can do in such a case (he adds) concerning some free actions of his subjects, God, who has infinite foreknowledge and power, certainly does concerning all those of men. Before he sent us into this world he knew exactly what all the tendencies of our will would be: he has endued us therewith, he also has disposed all other things that are outside us, to cause such and such objects to present themselves to our senses at such and such a time. He knew that as a result of this our free will would determine us toward some particular thing, and he has willed it thus; but he has not for that willed to constrain our free will thereto. In this king one may distinguish two different degrees of will, the one whereby he willed that these noblemen should fight, since he brought about their meeting, and the other whereby he did not will it, since he forbade duels. Even so theologians distinguish in God an absolute and independent will, whereby he wills that all things be done just as they are done, and another which is relative, and which concerns the merit or demerit of men, whereby he wills that his Laws be obeyed' (Descartes, letter 10 of vol. 1, p, 52. Compare

with that the quotation made by M. Arnauld, vol. 2, *et seqq*. of his *Reflexions on the System of Malebranche*, from Thomas Aquinas, on the antecedent and consequent will of God).

163. Here is M. Bayle's reply to that (*Reply to the Questions of a Provincial*, ch. 154,): 'This great philosopher is much mistaken, it seems to me. There would not be in this monarch any degree of will, either small or great, that these two noblemen should obey the law, and not fight. He would will entirely and solely that they should fight. That would not exculpate them, they would only follow their passion, they would be unaware that they conformed to the will of their sovereign: but he would be in truth the moral cause of their encounter, and he would not more entirely wish it supposing he were to inspire them with the desire or to give them the order for it. Imagine to yourself two princes each of whom wishes his eldest son to poison himself. One employs constraint, the other contents himself with secretly causing a grief that he knows will be sufficient to induce his son to poison himself. Will you be doubtful whether the will of the latter is less complete than the will of the former? M. Descartes is therefore assuming an unreal fact and does not at all solve the difficulty.'

164. One must confess that M. Descartes speaks somewhat crudely of the will of God in regard to evil in saying not only that God knew that our free will would determine us toward some particular thing, but also *that he also wished it*, albeit he did not will to constrain the will thereto. He speaks no less harshly in the eighth letter of the same volume, saying that not the slightest thought enters into the mind of a man which God does not *will*, and has not willed from all eternity, to enter there. Calvin never said anything harsher; and all that can only be excused if it is to be understood of a permissive will. M. Descartes' solution amounts to the distinction between the will expressed in the sign and the will expressive of the good pleasure (*inter voluntatem signi et beneplaciti*) which the moderns have

taken from the Schoolmen as regards the terms, but to which they have given a meaning not usual among the ancients. It is true that God may command something and yet not will that it be done, as when he commanded Abraham to sacrifice his son: he willed the obedience, and he did not will the action. But when God commands the virtuous action and forbids the sin, he wills indeed that which he ordains, but it is only by an antecedent will, as I have explained more than once.

165. M. Descartes' comparison is therefore not satisfactory; but it may be made so. One must make some change in the facts, inventing some reason to oblige the prince to cause or permit the two enemies to meet. They must, for instance, be together in the army or in other obligatory functions, a circumstance the prince himself cannot hinder without endangering his State. For example, the absence of either of them might be responsible for the disappearance of innumerable persons of his party from the army or cause grumbling among the soldiers and give rise to some great disturbance. In this case, therefore, one may say that the prince does not will the duel: he knows of it, but he permits it notwithstanding, for he prefers permitting the sin of others to committing one himself. Thus this corrected comparison may serve, provided that one observe the difference between God and the prince. The prince is forced into this permission by his powerlessness; a more powerful monarch would have no need of all these considerations; but God, who has power to do all that is possible, only permits sin because it is absolutely impossible to anyone at all to do better. The prince's action is peradventure not free from sorrow and regret. This regret is due to his imperfection, of which he is sensible; therein lies displeasure. God is incapable of such a feeling and finds, moreover, no cause therefor; he is infinitely conscious of his own perfection, and it may even be said that the imperfection in creatures taken individually changes for him into perfection in relation to the whole, and that it is an added glory

for the Creator. What more can one wish, when one possesses a boundless wisdom and when one is as powerful as one is wise; when one can do all and when one has the best?

166. Having once understood these things, we are hardened sufficiently, so it seems to me, against the strongest and most spirited objections. I have not concealed them: but there are some we shall merely touch upon, because they are too odious. The Remonstrants and M. Bayle (*Reply to the Questions of a Provincial*, vol. III, ch. 152, end page 919) quote St. Augustine, saying, '*crudelem esse misericordiam velle aliquem miserum esse ut eius miserearis*': in the same sense is cited Seneca *De Benef.* L. 6, c. 36, 37. I confess that one would have some reason to urge that against those who believed that God has no other cause for permitting sin than the design to have something wherewith to exercise punitive justice against the majority of men, and his mercy towards a small number of elect. But it must be considered that God had reasons for his permission of sin, more worthy of him and more profound in relation to us. Someone has dared to compare God's course of action with that of a Caligula, who has his edicts written in so small a hand and has them placarded in so high a place that it is not possible to read them; with that of a mother who neglects her daughter's honour in order to attain her own selfish ends; with that of Queen Catherine de Medicis, who is said to have abetted the love-affairs of her ladies in order to learn of the intrigues of the great; and even with that of Tiberius, who arranged, through the extraordinary services of the executioner, that the law forbidding the subjection of a virgin to capital punishment should no longer apply to the case of Sejanus's daughter. This last comparison was proposed by Peter Bertius, then an Armenian, but finally a member of the Roman communion. And a scandalous comparison has been made between God and Tiberius, which is related at length by Andreas Caroli in his *Memorabilia Ecclesiastica* of the last century, as M. Bayle observes.

Bertius used it against the Gomarists. I think that arguments of this kind are only valid against those who maintain that justice is an arbitrary thing in relation to God; or that he has a despotic power which can go so far as being able to condemn innocents; or, in short, that good is not the motive of his actions.

167. At that same time an ingenious satire was composed against the Gomarists, entitled *Fur praedestinatus, de gepredestineerdedief*, wherein there is introduced a thief condemned to be hanged, who attributes to God all the evil he has done; who believes himself predestined to salvation notwithstanding his wicked actions; who imagines that this belief is sufficient for him, and who defeats by arguments *ad hominem* a Counter-remonstrant minister called to prepare him for death: but this thief is finally converted by an old pastor who had been dismissed for his Arminianism, whom the gaoler, in pity for the criminal and for the weakness of the minister, had brought to him secretly. Replies were made to this lampoon, but replies to satires never please as much as the satires themselves. M. Bayle (*Reply to the Questions of a Provincial*, vol. III, ch. 154,) says that this book was printed in England in the time of Cromwell, and he appears not to have been informed that it was only a translation of the much older original Flemish. He adds that Dr. George Kendal wrote a confutation of it at Oxford in the year 1657, under the title of *Fur pro Tribunali*, and that the dialogue is there inserted. This dialogue presupposes, contrary to the truth, that the Counter-remonstrants make God the cause of evil, and teach a kind of predestination in the Mahometan manner according to which it does not matter whether one does good or evil, and the assumption that one is predestined assures the fact. They by no means go so far. Nevertheless it is true that there are among them some Supralapsarians and others who find it hard to declare themselves in clear terms upon the justice of God and the principles of piety and morals in man. For they imagine despotism in God,

and demand that man be convinced, without reason, of the absolute certainty of his election, a course that is liable to have dangerous consequences. But all those who acknowledge that God produces the best plan, having chosen it from among all possible ideas of the universe; that he there finds man inclined by the original imperfection of creatures to misuse his free will and to plunge into misery; that God prevents the sin and the misery in so far as the perfection of the universe, which is an emanation from his, may permit it: those, I say, show forth more clearly that God's intention is the one most right and holy in the world; that the creature alone is guilty, that his original limitation or imperfection is the source of his wickedness, that his evil will is the sole cause of his misery; that one cannot be destined to salvation without also being destined to the holiness of the children of God, and that all hope of election one can have can only be founded upon the good will infused into one's heart by the grace of God.

168. *Metaphysical considerations* also are brought up against my explanation of the moral cause of moral evil; but they will trouble me less since I have dismissed the objections derived from moral reasons, which were more impressive. These metaphysical considerations concern the nature of the *possible* and of the *necessary*; they go against my fundamental assumption that God has chosen the best of all possible worlds. There are philosophers who have maintained that there is nothing possible except that which actually happens. These are those same people who thought or could have thought that all is necessary unconditionally. Some were of this opinion because they admitted a brute and blind necessity in the cause of the existence of things: and it is these I have most reason for opposing. But there are others who are mistaken only because they misuse terms. They confuse moral necessity with metaphysical necessity: they imagine that since God cannot help acting for the best he is thus deprived of freedom, and things are endued with that necessity which philosophers and

theologians endeavour to avoid. With these writers my dispute is only one of words, provided they admit in very deed that God chooses and does the best. But there are others who go further, they think that God could have done better. This is an opinion which must be rejected: for although it does not altogether deprive God of wisdom and goodness, as do the advocates of blind necessity, it sets bounds thereto, thus derogating from God's supreme perfection.

169. The question of the *possibility of things that do not happen* has already been examined by the ancients. It appears that Epicurus, to preserve freedom and to avoid an absolute necessity, maintained, after Aristotle, that contingent futurities were not susceptible of determinate truth. For if it was true yesterday that I should write to-day, it could therefore not fail to happen, it was already necessary; and, for the same reason, it was from all eternity. Thus all that which happens is necessary, and it is impossible for anything different to come to pass. But since that is not so it would follow, according to him, that contingent futurities have no determinate truth. To uphold this opinion, Epicurus went so far as to deny the first and the greatest principle of the truths of reason, he denied that every assertion was either true or false. Here is the way they confounded him: 'You deny that it was true yesterday that I should write to-day; it was therefore false.' The good man, not being able to admit this conclusion, was obliged to say that it was neither true nor false. After that, he needs no refutation, and Chrysippus might have spared himself the trouble he took to prove the great principle of contradictories, following the account by Cicero in his book *De Fato*: 'Contendit omnes nervos Chrysippus ut persuadeat omne Αξιωμα aut verum esse aut falsum. Ut enim Epicurus veretur ne si hoc concesserit, concedendum sit, fato fieri quaecunque fiant; si enim alterum ex aeternitate verum sit, esse id etiam certum; si certum, etiam necessarium; ita et necessitatem et fatum confirmari putat; sic Chrysippus metuit ne non, si

non obtinuerit omne quod enuncietur aut verum esse aut falsum, omnia fato fieri possint ex causis aeternis rerum futurarum.' M. Bayle observes (*Dictionary*, article 'Epicurus', let. T,) 'that neither of these two great philosophers [Epicurus and Chrysippus] understood that the truth of this maxim, every proposition is true or false, is independent of what is called *fatum*: it could not therefore serve as proof of the existence of the *fatum*, as Chrysippus maintained and as Epicurus feared. Chrysippus could not have conceded, without damaging his own position, that there are propositions which are neither true nor false. But he gained nothing by asserting the contrary: for, whether there be free causes or not, it is equally true that this proposition, The Grand Mogul will go hunting to-morrow, is true or false. Men rightly regarded as ridiculous this speech of Tiresias: All that I shall say will happen or not, for great Apollo confers on me the faculty of prophesying. If, assuming the impossible, there were no God, it would yet be certain that everything the greatest fool in the world should predict would happen or would not happen. That is what neither Chrysippus nor Epicurus has taken into consideration.' Cicero, lib. I, *De Nat. Deorum*, with regard to the evasions of the Epicureans expressed the sound opinion (as M. Bayle observes towards the end of the same page) that it would be much less shameful to admit that one cannot answer one's opponent, than to have recourse to such answers. Yet we shall see that M. Bayle himself confused the certain with the necessary, when he maintained that the choice of the best rendered things necessary.

170. Let us come now to the possibility of things that do not happen, and I will give the very words of M. Bayle, albeit they are somewhat discursive. This is what he says on the matter in his *Dictionary* (article 'Chrysippus', let. S,): 'The celebrated dispute on things possible and things impossible owed its origin to the doctrine of the Stoics concerning fate. The question was to know whether, among the things which have never been and never

will be, there are some possible; or whether all that is not, all that has never been, all that will never be, was impossible. A famous dialectician of the Megaric Sect, named Diodorus, gave a negative answer to the first of these two questions and an affirmative to the second; but Chrysippus vehemently opposed him. Here are two passages of Cicero (epist. 4, lib. 9, *Ad Familiar.*): "περι δυνατων me scito κατα Διοδωρον κρινειν. Quapropter si venturus es, scito necesse esse te venire. Sin autem non es, των αδυνατων est te venire. Nunc vide utra te κρισις magis delectet, Χρυσιππεια ne, an haec; quam noster Diodorus [a Stoic who for a long time had lived in Cicero's house] non concoquebat." This is quoted from a letter that Cicero wrote to Varro. He sets forth more comprehensively the whole state of the question, in the little book *De Fato*. I am going to quote a few pieces (Cic. *De Fato*, p. m. 65): "Vigila, Chrysippe, ne tuam causam, in qua tibi cum Diodoro valente Dialectico magna luctatio est, deseras... omne ergo quod falsum dicitur in futuro, id fieri non potest. At hoc, Chrysippe, minime vis, maximeque tibi de hoc ipso cum Diodoro certamen est. Ille enim id solum fieri posse dicit, quod aut sit verum, aut futurum sit verum; et quicquid futurum sit, id dicit fieri necesse esse; et quicquid non sit futurum, id negat fieri posse. Tu etiam quae non sint futura, posse fieri dicis, ut frangi hanc gemmam, etiamsi id nunquam futurum sit: neque necesse fuisse Cypselum regnare Corinthi, quamquam id millesimo ante anno Apollinis Oraculo editum esset.... Placet Diodoro, id solum fieri posse, quod aut verum sit, aut verum futurum sit: qui locus attingit hanc quaestionem, nihil fieri, quod non necesse fuerit; et quicquid fieri possit, id aut esse jam, aut futurum esse: nec magis commutari ex veris in falsa ea posse quae futura sunt, quam ea quae facta sunt: sed in factis immutabilitatem apparere; in futuris quibusdam, quia non apparent, ne inesse quidem videri: ut in eo qui mortifero morbo urgeatur, verum sit, hic morietur hoc morbo: at hoc idem si vere dicatur in eo, in quo tanta vis morbi non appareat, nihilominus futurum sit. Ita fit ut

commutatio ex vero in falsum, ne in futuro quidem ulla fieri possit." Cicero makes it clear enough that Chrysippus often found himself in difficulties in this dispute, and that is no matter for astonishment: for the course he had chosen was not bound up with his dogma of fate, and, if he had known how, or had dared, to reason consistently, he would readily have adopted the whole hypothesis of Diodorus. We have seen already that the freedom he assigned to the soul, and his comparison of the cylinder, did not preclude the possibility that in reality all the acts of the human will were unavoidable consequences of fate. Hence it follows that everything which does not happen is impossible, and that there is nothing possible but that which actually comes to pass. Plutarch (*De Stoicor. Repugn.* p, 1054) discomfits him completely, on that point as well as on the dispute with Diodorus, and maintains that his opinion on possibility is altogether contrary to the doctrine of *fatum*. Observe that the most eminent Stoics had written on this matter without following the same path. Arrian (in *Epict.* lib. 2, c. 29, p. m. 166) named four of them, who are Chrysippus, Cleanthes, Archidemus and Antipater. He evinces great scorn for this dispute; and M. Menage need not have cited him as a writer who had spoken in commendation of the work of Chrysippus περι δυνατων ("citatur honorifice apud Arrianum", Menag. in *Laert.* I, 7, 341) for assuredly these words, "γεγραφε δε και Χρυσιππος θαυμαστως, etc. de his rebus mira scripsit Chrysippus", etc. are not in that connexion a eulogy. That is shown by the passages immediately before and after it. Dionysius of Halicarnassus (*De Collocat. Verbor.* c. 17, p. m. 11) mentions two treatises by Chrysippus, wherein, under a title that promised something different, much of the logicians' territory had been explored. The work was entitled "περι της συνταξεως των του λογου μερων, de partium orationis collocatione", and treated only of propositions true and false, possible and impossible, contingent and equivocal, etc. matter that our Schoolmen have pounded down and reduced to its essence. Take note that

Chrysippus recognized that past things were necessarily true, which Cleanthes had not been willing to admit. (Arrian, *ubi supra*, p. m. 165.) “Ου παν δε παρεληλυθος αληθες αναγκαιον εστι, καθαπερ ʽοι περι Κλεανθην φερεσθαι δοκουσι. Non omne praeteritum ex necessitate verum est, ut illi qui Cleanthem sequuntur sentiunt.” We have already seen (, col. 2) that Abélard is alleged to have taught a doctrine which resembles that of Diodorus. I think that the Stoics pledged themselves to give a wider range to possible things than to future things, for the purpose of mitigating the odious and frightful conclusions which were drawn from their dogma of fatality.’

It is sufficiently evident that Cicero when writing to Varro the words that have just been quoted (lib. 9, E, *Ad Familiar.*) had not enough comprehension of the effect of Diodorus’s opinion, since he found it preferable. He presents tolerably well in his book *De Fato* the opinions of those writers, but it is a pity that he has not always added the reasons which they employed. Plutarch in his treatise on the contradictions of the Stoics and M. Bayle are both surprised that Chrysippus was not of the same opinion as Diodorus, since he favours fatality. But Chrysippus and even his master Cleanthes were on that point more reasonable than is supposed. That will be seen as we proceed. It is open to question whether the past is more necessary than the future. Cleanthes held the opinion that it is. The objection is raised that it is necessary *ex hypothesi* for the future to happen, as it is necessary *ex hypothesi* for the past to have happened. But there is this difference, that it is not possible to act on the past state, that would be a contradiction; but it is possible to produce some effect on the future. Yet the hypothetical necessity of both is the same: the one cannot be changed, the other will not be; and once that is past, it will not be possible for it to be changed either.

171. The famous Pierre Abélard expressed an opinion resembling that of Diodorus in the statement that God can do only that which he does. It was the third of the fourteen propositions taken from his works which were censured at the Council of Sens. It had been taken from the third book of his *Introduction to Theology*, where he treats especially of the power of God. The reason he gave for his statement was that God can do only that which he wills. Now God cannot will to do anything other than that which he does, because, of necessity, he must will whatever is fitting. Hence it follows that all that which he does not, is not fitting, that he cannot will to do it, and consequently that he cannot do it. Abélard admits himself that this opinion is peculiar to him, that hardly anyone shares in it, that it seems contrary to the doctrine of the saints and to reason and derogatory to the greatness of God. It appears that this author was a little too much inclined to speak and to think differently from others: for in reality this was only a dispute about words: he was changing the use of terms. Power and will are different faculties, whose objects also are different; it is confusing them to say that God can do only that which he wills. On the contrary, among various possibles, he wills only that which he finds the best. For all possibles are regarded as objects of power, but actual and existing things are regarded as the objects of his decretory will. Abélard himself acknowledged it. He raises this objection for himself: a reprobate can be saved; but he can only be saved if God saves him. God can therefore save him, and consequently do something that he does not. Abélard answers that it may indeed be said that this man can be saved in respect of the possibility of human nature, which is capable of salvation: but that it may not be said that God can save him in respect of God himself, because it is impossible that God should do that which he must not do. But Abélard admits that it may very well be said in a sense, speaking absolutely and setting aside the assumption of reprobation, that such an one who is reprobate can be saved, and that thus

often that which God does not can be done. He could therefore have spoken like the rest, who mean nothing different when they say that God can save this man, and that he can do that which he does not.

172. The so-called necessity of Wyclif, which was condemned by the Council of Constance, seems to arise simply from this same misunderstanding. I think that men of talent do wrong to truth and to themselves when, without reason, they bring into use new and displeasing expressions. In our own time the celebrated Mr. Hobbes supported this same opinion, that what does not happen is impossible. He proves it by the statement that all the conditions requisite for a thing that shall not exist (*omnia rei non futurae requisita*) are never found together, and that the thing cannot exist otherwise. But who does not see that that only proves a hypothetical impossibility? It is true that a thing cannot exist when a requisite condition for it is lacking. But as we claim to be able to say that the thing can exist although it does not exist, we claim in the same way to be able to say that the requisite conditions can exist although they do not exist. Thus Mr. Hobbes's argument leaves the matter where it is. The opinion which was held concerning Mr. Hobbes, that he taught an absolute necessity of all things, brought upon him much discredit, and would have done him harm even had it been his only error.

173. Spinoza went further: he appears to have explicitly taught a blind necessity, having denied to the Author of Things understanding and will, and assuming that good and perfection relate to us only, and not to him. It is true that Spinoza's opinion on this subject is somewhat obscure: for he grants God thought, after having divested him of understanding, *cogitationem, non intellectum concedit Deo*. There are even passages where he relents on the question of necessity. Nevertheless, as far as one can understand him, he acknowledges no goodness in God, properly speaking, and he teaches that all things exist through the necessity of the divine

nature, without any act of choice by God. We will not waste time here in refuting an opinion so bad, and indeed so inexplicable. My own opinion is founded on the nature of the possibles, that is, of things that imply no contradiction. I do not think that a Spinozist will say that all the romances one can imagine exist actually now, or have existed, or will still exist in some place in the universe. Yet one cannot deny that romances such as those of Mademoiselle de Scudéry, or as *Octavia*, are possible. Let us therefore bring up against him these words of M. Bayle, which please me well, on page 390, 'It is to-day', he says, 'a great embarrassment for the Spinozists to see that, according to their hypothesis, it was as impossible from all eternity that Spinoza, for instance, should not die at The Hague, as it is impossible for two and two to make six. They are well aware that it is a necessary conclusion from their doctrine, and a conclusion which disheartens, affrights, and stirs the mind to revolt, because of the absurdity it involves, diametrically opposed to common sense. They are not well pleased that one should know they are subverting a maxim so universal and so evident as this one: All that which implies contradiction is impossible, and all that which implies no contradiction is possible.'

174. One may say of M. Bayle, 'ubi bene, nemo melius', although one cannot say of him what was said of Origen, 'ubi male, nemo pejus'. I will only add that what has just been indicated as a maxim is in fact the definition of the *possible* and the *impossible*. M. Bayle, however, adds here towards the end a remark which somewhat spoils his eminently reasonable statement. 'Now what contradiction would there be if Spinoza had died in Leyden? Would Nature then have been less perfect, less wise, less powerful?' He confuses here what is impossible because it implies contradiction with what cannot happen because it is not meet to be chosen. It is true that there would have been no contradiction in the supposition that Spinoza died in Leyden and not at The Hague; there would have been

nothing so possible: the matter was therefore indifferent in respect of the power of God. But one must not suppose that any event, however small it be, can be regarded as indifferent in respect of his wisdom and his goodness. Jesus Christ has said divinely well that everything is numbered, even to the hairs of our head. Thus the wisdom of God did not permit that this event whereof M. Bayle speaks should happen otherwise than it happened, not as if by itself it would have been more deserving of choice, but on account of its connexion with that entire sequence of the universe which deserved to be given preference. To say that what has already happened was of no interest to the wisdom of God, and thence to infer that it is therefore not necessary, is to make a false assumption and argue incorrectly to a true conclusion. It is confusing what is necessary by moral necessity, that is, according to the principle of Wisdom and Goodness, with what is so by metaphysical and brute necessity, which occurs when the contrary implies contradiction. Spinoza, moreover, sought a metaphysical necessity in events. He did not think that God was determined by his goodness and by his perfection (which this author treated as chimeras in relation to the universe), but by the necessity of his nature; just as the semicircle is bound to enclose only right angles, without either knowing or willing this. For Euclid demonstrated that all angles enclosed between two straight lines drawn from the extremities of the diameter towards a point on the circumference of the circle are of necessity right angles, and that the contrary implies contradiction.

175. There are people who have gone to the other extreme: under the pretext of freeing the divine nature from the yoke of necessity they wished to regard it as altogether indifferent, with an indifference of equipoise. They did not take into account that just as metaphysical necessity is preposterous in relation to God's actions *ad extra*, so moral necessity is worthy of him. It is a happy necessity which obliges wisdom to do good, whereas

indifference with regard to good and evil would indicate a lack of goodness or of wisdom. And besides, the indifference which would keep the will in a perfect equipoise would itself be a chimera, as has been already shown: it would offend against the great principle of the determinant reason.

176. Those who believe that God established good and evil by an arbitrary decree are adopting that strange idea of mere indifference, and other absurdities still stranger. They deprive God of the designation *good*: for what cause could one have to praise him for what he does, if in doing something quite different he would have done equally well? And I have very often been surprised that divers Supralapsarian theologians, as for instance Samuel Rutherford, a Professor of Theology in Scotland, who wrote when the controversies with the Remonstrants were at their height, could have been deluded by so strange an idea. Rutherford (in his *Exercitationes Apologeticae pro Gratia*) says positively that nothing is unjust or morally bad in God's eyes before he has forbidden it: thus without this prohibition it would be a matter of indifference whether one murdered or saved a man, loved God or hated him, praised or blasphemed him. Nothing is so unreasonable as that. One may teach that God established good and evil by a positive law, or one may assert that there was something good and just before his decree, but that he is not required to conform to it, and that nothing prevents him from acting unjustly and from perhaps condemning innocence: but it all comes to the same thing, offering almost equal dishonour to God. For if justice was established arbitrarily and without any cause, if God came upon it by a kind of hazard, as when one draws lots, his goodness and his wisdom are not manifested in it, and there is nothing at all to attach him to it. If it is by a purely arbitrary decree, without any reason, that he has established or created what we call justice and goodness, then he can annul them or change their nature. Thus one would have no reason to assume that he will observe them always, as it

would be possible to say he will observe them on the assumption that they are founded on reasons. The same would hold good more or less if his justice were different from ours, if (for example) it were written in his code that it is just to make the innocent eternally unhappy. According to these principles also, nothing would compel God to keep his word or would assure us of its fulfilment. For why should the law of justice, which states that reasonable promises must be kept, be more inviolable for him than any other laws?

177. All these three dogmas, albeit a little different from one another, namely, (1) that the nature of justice is arbitrary, (2) that it is fixed, but it is not certain that God will observe it, and finally (3) that the justice we know is not that which he observes, destroy the confidence in God that gives us tranquillity, and the love of God that makes our happiness. There is nothing to prevent such a God from behaving as a tyrant and an enemy of honest folk, and from taking pleasure in that which we call evil. Why should he not, then, just as well be the evil principle of the Manichaeans as the single good principle of the orthodox? At least he would be neutral and, as it were, suspended between the two, or even sometimes the one and sometimes the other. That would be as if someone were to say that Oromasdes and Arimanius reign in turns, according to which of the two is the stronger or the more adroit. It is like the saying of a certain Moghul woman. She, so it seems, having heard it said that formerly under Genghis Khan and his successors her nation had had dominion over most of the North and East, told the Muscovites recently, when M. Isbrand went to China on behalf of the Czar, through the country of those Tartars, that the god of the Moghuls had been driven from Heaven, but that one day he would take his own place again. The true God is always the same: natural religion itself demands that he be essentially as good and wise as he is powerful. It is scarcely more contrary to reason and piety to say that God acts without cognition, than to

maintain that he has cognition which does not find the eternal rules of goodness and of justice among its objects, or again to say that he has a will such as heeds not these rules.

178. Some theologians who have written of God's right over creatures appear to have conceded to him an unrestricted right, an arbitrary and despotic power. They thought that would be placing divinity on the most exalted level that may be imagined for it, and that it would abase the creature before the Creator to such an extent that the Creator is bound by no laws of any kind with respect to the creature. There are passages from Twiss, Rutherford and some other Supralapsarians which imply that God cannot sin whatever he may do, because he is subject to no law. M. Bayle himself considers that this doctrine is monstrous and contrary to the holiness of God (*Dictionary*, v. 'Paulicians', *in initio*); but I suppose that the intention of some of these writers was less bad than it seems to be. Apparently they meant by the term right, ανυπευθυνιαν, a state wherein one is responsible to none for one's actions. But they will not have denied that God owes to himself what goodness and justice demand of him. On that matter one may see M. Amyraut's *Apology for Calvin*: it is true that Calvin appears orthodox on this subject, and that he is by no means one of the extreme Supralapsarians.

179. Thus, when M. Bayle says somewhere that St. Paul extricates himself from predestination only through the consideration of God's absolute right, and the incomprehensibility of his ways, it is implied that, if one understood them, one would find them consistent with justice, God not being able to use his power otherwise. St. Paul himself says that it is a *depth*, but a depth of wisdom (*altitudo sapientiae*), and *justice* is included in *the goodness of the All-wise*. I find that M. Bayle speaks very well elsewhere on the application of our notions of goodness to the actions of God (*Reply to the Questions of a Provincial*, ch. 81,): 'One must not assert

here', he says, 'that the goodness of the infinite Being is not subject to the same rules as the goodness of the creature. For if there is in God an attribute that can be called goodness, the marks of goodness in general must apply to him. Now when we reduce goodness to the most general abstraction, we find therein the will to do good. Divide and subdivide into as many kinds as you shall please this general goodness, into infinite goodness, finite goodness, kingly goodness, goodness of a father, goodness of a husband, goodness of a master, you will find in each, as an inseparable attribute, the will to do good.'

180. I find also that M. Bayle combats admirably the opinion of those who assert that goodness and justice depend solely upon the arbitrary choice of God; who suppose, moreover, that if God had been determined by the goodness of things themselves to act, he would be entirely subjected to necessity in his actions, a state incompatible with freedom. That is confusing metaphysical necessity with moral necessity. Here is what M. Bayle says in objection to this error (*Reply*, ch. 89,): 'The consequence of this doctrine will be, that before God resolved upon creating the world he saw nothing better in virtue than in vice, and that his ideas did not show him that virtue was more worthy of his love than vice. That leaves no distinction between natural right and positive right; there will no longer be anything unalterable or inevitable in morals; it will have been just as possible for God to command people to be vicious as to command them to be virtuous; and one will have no certainty that the moral laws will not one day be abrogated, as the ceremonial laws of the Jews were. This, in a word, leads us straight to the belief that God was the free author, not only of goodness and of virtue, but also of truth and of the essence of things. That is what certain of the Cartesians assert, and I confess that their opinion (see the Continuation of *Divers Thoughts on the Comet*,) might be of some avail in certain circumstances. Yet it is open to dispute for so many reasons, and

subject to consequences so troublesome (see chapter 152 of the same Continuation) that there are scarcely any extremes it were not better to suffer rather than plunge into that one. It opens the door to the most exaggerated Pyrrhonism: for it leads to the assertion that this proposition, three and three make six, is only true where and during the time when it pleases God; that it is perhaps false in some parts of the universe; and that perhaps it will be so among men in the coming year. All that depends on the free will of God could have been limited to certain places and certain times, like the Judaic ceremonies. This conclusion will be extended to all the laws of the Decalogue, if the actions they command are in their nature divested of all goodness to the same degree as the actions they forbid.'

181. To say that God, having resolved to create man just as he is, could not but have required of him piety, sobriety, justice and chastity, because it is impossible that the disorders capable of overthrowing or disturbing his work can please him, that is to revert in effect to the common opinion. Virtues are virtues only because they serve perfection or prevent the imperfection of those who are virtuous, or even of those who have to do with them. And they have that power by their nature and by the nature of rational creatures, before God decrees to create them. To hold a different opinion would be as if someone were to say that the rules of proportion and harmony are arbitrary with regard to musicians because they occur in music only when one has resolved to sing or to play some instrument. But that is exactly what is meant by being essential to good music: for those rules belong to it already in the ideal state, even when none yet thinks of singing, since it is known that they must of necessity belong to it as soon as one shall sing. In the same way virtues belong to the ideal state of the rational creature before God decrees to create it; and it is for that very reason we maintain that virtues are good by their nature.

182. M. Bayle has inserted a special chapter in his Continuation of *Divers Thoughts on the Comet* (it is chapter 152) where he shows ‘that the Christian Doctors teach that there are things which are just antecedently to God’s decrees’. Some theologians of the Augsburg Confession censured some of the Reformed who appeared to be of a different opinion; and this error was regarded as if it were a consequence of the absolute decree, which doctrine seems to exempt the will of God from any kind of reason, *ubi stat pro ratione voluntas*. But, as I have observed already on various occasions, Calvin himself acknowledged that the decrees of God are in conformity with justice and wisdom, although the reasons that might prove this conformity in detail are unknown to us. Thus, according to him, the rules of goodness and of justice are anterior to the decrees of God. M. Bayle, in the same place, quotes a passage from the celebrated M. Turretin which draws a distinction between natural divine laws and positive divine laws. Moral laws are of the first kind and ceremonial of the second. Samuel Desmarests, a celebrated theologian formerly at Groningen, and Herr Strinesius, who is still at Frankfort on the Oder, advocated this same distinction; and I think that it is the opinion most widely accepted even among the Reformed. Thomas Aquinas and all the Thomists were of the same opinion, with the bulk of the Schoolmen and the theologians of the Roman Church. The Casuists also held to that idea: I count Grotius among the most eminent of them, and he was followed in this point by his commentators. Herr Pufendorf appeared to be of a different opinion, which he insisted on maintaining in the face of censure from some theologians; but he need not be taken into account, not having advanced far enough in subjects of this kind. He makes a vigorous protest against the absolute decree, in his *Fecialis divinus*, and yet he approves what is worst in the opinions of the champions of this decree, and without which this decree (as others of the Reformed explain) becomes endurable. Aristotle was very orthodox on this

matter of justice, and the Schoolmen followed him: they distinguish, just as Cicero and the Jurists do, between perpetual right, which is binding on all and everywhere, and positive right, which is only for certain times and certain peoples. I once read with enjoyment the *Euthyphro* of Plato, who makes Socrates uphold the truth on that point, and M. Bayle has called attention to the same passage.

183. M. Bayle himself upholds this truth with considerable force in a certain passage, which it will be well to quote here in its entirety, long as it is (vol. II of the Continuation of *Divers Thoughts on the Comet*, ch. 152, *seqq.*): 'According to the teaching of countless writers of importance', he says, 'there is in nature and in the essence of certain things a moral good or evil that precedes the divine decree. They prove this doctrine principally through the frightful consequences that attend the opposite dogma. Thus from the proposition that to do wrong to no man would be a good action, not in itself but by an arbitrary dispensation of God's will, it would follow that God could have given to man a law directly opposed at all points to the commandments of the Decalogue. That is horrifying. But here is a more direct proof, one derived from metaphysics. One thing is certain, that the existence of God is not an effect of his will. He exists not because he wills his existence, but through the necessity of his infinite nature. His power and his knowledge exist through the same necessity. He is all-powerful, he knows all things, not because he wills it thus, but because these are attributes necessarily identified with him. The dominion of his will relates only to the exercise of his power, he gives effect outside himself only to that which he wills, and he leaves all the rest in the state of mere possibility. Thence it comes that this dominion extends only over the existence of creatures, and not over their essential being. God was able to create matter, a man, a circle, or leave them in nothingness, but he was not able to produce them without giving them their essential properties. He had of necessity to

make man a rational animal and to give the round shape to a circle, since, according to his eternal ideas, independent of the free decrees of his will, the essence of man lay in the properties of being animal and rational, and since the essence of the circle lay in having a circumference equally distant from the centre as to all its parts. This is what has caused the Christian philosophers to acknowledge that the essences of things are eternal, and that there are propositions of eternal truth; consequently that the essences of things and the truth of the first principles are immutable. That is to be understood not only of theoretical but also of practical first principles, and of all the propositions that contain the true definition of creatures. These essences and these truths emanate from the same necessity of nature as the knowledge of God. Since therefore it is by the nature of things that God exists, that he is all-powerful, and that he has perfect knowledge of all things, it is also by the nature of things that matter, the triangle, man and certain actions of man, etc. have such and such properties essentially. God saw from all eternity and in all necessity the essential relations of numbers, and the identity of the subject and predicate in the propositions that contain the essence of each thing. He saw likewise that the term just is included in these propositions: to esteem what is estimable, be grateful to one's benefactor, fulfil the conditions of a contract, and so on, with many others relating to morals. One is therefore justified in saying that the precepts of natural law assume the reasonableness and justice of that which is enjoined, and that it would be man's duty to practise what they contain even though God should have been so indulgent as to ordain nothing in that respect. Pray observe that in going back with our visionary thoughts to that ideal moment when God has yet decreed nothing, we find in the ideas of God the principles of morals under terms that imply an obligation. We understand these maxims as certain, and derived from the eternal and immutable order: it beseems the rational creature to conform to reason; a rational creature

conforming to reason is to be commended, but not conforming thereto is blameworthy. You would not dare to deny that these truths impose upon man a duty in relation to all acts which are in conformity with strict reason, such as these: one must esteem all that is estimable; render good for good; do wrong to no man; honour one's father; render to every man that which is his due, etc. Now since by the very nature of things, and before the divine laws, the truths of morality impose upon man certain duties, Thomas Aquinas and Grotius were justified in saying that if there were no God we should nevertheless be obliged to conform to natural law. Others have said that even supposing all rational beings in existence were to perish, true propositions would remain true. Cajetan maintained that if he remained alone in the universe, all other things without any exception having been destroyed, the knowledge that he had of the nature of a rose would nevertheless subsist.'

184. The late Jacob Thomasius, a celebrated Professor at Leipzig, made the apt observation in his elucidations of the philosophic rules of Daniel Stahl, a Jena professor, that it is not advisable to go altogether beyond God, and that one must not say, with some Scotists, that the eternal verities would exist even though there were no understanding, not even that of God. For it is, in my judgement, the divine understanding which gives reality to the eternal verities, albeit God's will have no part therein. All reality must be founded on something existent. It is true that an atheist may be a geometrician: but if there were no God, geometry would have no object. And without God, not only would there be nothing existent, but there would be nothing possible. That, however, does not hinder those who do not see the connexion of all things one with another and with God from being able to understand certain sciences, without knowing their first source, which is in God. Aristotle, although he also scarcely knew that source, nevertheless said something of the same kind which was very apposite. He

acknowledged that the principles of individual forms of knowledge depend on a superior knowledge which gives the reason for them; and this superior knowledge must have being, and consequently God, the source of being, for its object. Herr Dreier of Königsberg has aptly observed that the true metaphysics which Aristotle sought, and which he called την ζητουμενην, his *desideratum*, was theology.

185. Yet the same M. Bayle, who says so much that is admirable in order to prove that the rules of goodness and justice, and the eternal verities in general, exist by their nature, and not by an arbitrary choice of God, has spoken very hesitatingly about them in another passage (Continuation of *Divers Thoughts on the Comet*, vol. II, ch. 114, towards the end). After having given an account of the opinion of M. Descartes and a section of his followers, who maintain that God is the free cause of truths and of essences, he adds (): 'I have done all that I could to gain true understanding of this dogma and to find the solution of the difficulties surrounding it. I confess to you quite simply that I still cannot properly fathom it. That does not discourage me; I suppose, as other philosophers in other cases have supposed, that time will unfold the meaning of this noble paradox. I wish that Father Malebranche had thought fit to defend it, but he took other measures.' Is it possible that the enjoyment of doubt can have such influence upon a gifted man as to make him wish and hope for the power to believe that two contradictories never exist together for the sole reason that God forbade them to, and, moreover, that God could have issued them an order to ensure that they always walked together? There is indeed a noble paradox! Father Malebranche showed great wisdom in taking other measures.

186. I cannot even imagine that M. Descartes can have been quite seriously of this opinion, although he had adherents who found this easy to believe, and would in all simplicity follow him where he only made

pretence to go. It was apparently one of his tricks, one of his philosophic feints: he prepared for himself some loophole, as when for instance he discovered a trick for denying the movement of the earth, while he was a Copernican in the strictest sense. I suspect that he had in mind here another extraordinary manner of speaking, of his own invention, which was to say that affirmations and negations, and acts of inner judgement in general, are operations of the will. Through this artifice the eternal verities, which until the time of Descartes had been named an object of the divine understanding, suddenly became an object of God's will. Now the acts of his will are free, therefore God is the free cause of the verities. That is the outcome of the matter. *Spectatum admissi.* A slight change in the meaning of terms has caused all this commotion. But if the affirmations of necessary truths were actions of the will of the most perfect mind, these actions would be anything but free, for there is nothing to choose. It seems that M. Descartes did not declare himself sufficiently on the nature of freedom, and that his conception of it was somewhat unusual: for he extended it so far that he even held the affirmations of necessary truths to be free in God. That was preserving only the name of freedom.

187. M. Bayle, who with others conceives this to be a freedom of indifference, that God had had to establish (for instance) the truths of numbers, and to ordain that three times three made nine, whereas he could have commanded them to make ten, imagines in this strange opinion, supposing it were possible to defend it, some kind of advantage gained against the Stratonists. Strato was one of the leaders of the School of Aristotle, and the successor of Theophrastus; he maintained (according to Cicero's account) that this world had been formed such as it is by Nature or by a necessary cause devoid of cognition. I admit that that might be so, if God had so preformed matter as to cause such an effect by the laws of motion alone. But without God there would not even have been any reason

for existence, and still less for any particular existence of things: thus Strato's system is not to be feared.

188. Nevertheless M. Bayle is in difficulties over this: he will not admit plastic natures devoid of cognition, which Mr. Cudworth and others had introduced, for fear that the modern Stratonists, that is, the Spinozists, take advantage of it. This has involved him in disputes with M. le Clerc. Under the influence of this error, that a non-intelligent cause can produce nothing where contrivance appears, he is far from conceding to me that *preformation* which produces naturally the organs of animals, and *the system of a harmony pre-established by God* in bodies, to make them respond in accordance with their own laws to the thoughts and the wills of souls. But it ought to have been taken into account that this non-intelligent cause, which produces such beautiful things in the grains and seeds of plants and animals, and effects the actions of bodies as the will ordains them, was formed by the hand of God: and God is infinitely more skilful than a watchmaker, who himself makes machines and automata that are capable of producing as wonderful effects as if they possessed intelligence.

189. Now to come to M. Bayle's apprehensions concerning the Stratonists, in case one should admit truths that are not dependent upon the will of God: he seems to fear lest they may take advantage against us of the perfect regularity of the eternal verities. Since this regularity springs only from the nature and necessity of things, without being directed by any cognition, M. Bayle fears that one might with Strato thence infer that the world also could have become regular through a blind necessity. But it is easy to answer that. In the region of the eternal verities are found all the possibles, and consequently the regular as well as the irregular: there must be a reason accounting for the preference for order and regularity, and this reason can only be found in understanding. Moreover these very truths can have no existence without an understanding to take cognizance of them; for

they would not exist if there were no divine understanding wherein they are realized, so to speak. Hence Strato does not attain his end, which is to exclude cognition from that which enters into the origin of things.

190. The difficulty that M. Bayle has imagined in connexion with Strato seems a little too subtle and far-fetched. That is termed: *timere, ubi non est timor*. He makes another difficulty, which has just as slight a foundation, namely, that God would be subjected to a kind of *fatum*. Here are his words (): 'If they are propositions of eternal truth, which are such by their nature and not by God's institution, if they are not true by a free decree of his will, but if on the contrary he has recognized them as true of necessity, because such was their nature, there is a kind of *fatum* to which he is subjected; there is an absolutely insurmountable natural necessity. Thence comes also the result that the divine understanding in the infinity of its ideas has always and at the outset hit upon their perfect conformity with their objects, without the guidance of any cognition; for it would be a contradiction to say that any exemplary cause had served as a plan for the acts of God's understanding. One would never that way find eternal ideas or any first intelligence. One must say, then, that a nature which exists of necessity always finds its way, without any need for it to be shown. How then shall we overcome the obstinacy of a Stratonist?'

191. But again it is easy to answer. This so-called *fatum*, which binds even the Divinity, is nothing but God's own nature, his own understanding, which furnishes the rules for his wisdom and his goodness; it is a happy necessity, without which he would be neither good nor wise. Is it to be desired that God should not be bound to be perfect and happy? Is our condition, which renders us liable to fail, worth envying? And should we not be well pleased to exchange it for sinlessness, if that depended upon us? One must be indeed weary of life to desire the freedom to destroy oneself and to pity the Divinity for not having that freedom. M. Bayle himself

reasons thus elsewhere against those who laud to the skies an extravagant freedom which they assume in the will, when they would make the will independent of reason.

192. Moreover, M. Bayle wonders ‘that the divine understanding in the infinity of its ideas always and at the outset hits upon their perfect conformity with their objects, without the guidance of any cognition’. This objection is null and void. Every distinct idea is, through its distinctness, in conformity with its object, and in God there are distinct ideas only. At first, moreover, the object exists nowhere; but when it comes into existence, it will be formed according to this idea. Besides, M. Bayle knows very well that the divine understanding has no need of time for seeing the connexion of things. All trains of reasoning are in God in a transcendent form, and they preserve an order amongst them in his understanding, as well as in ours: but with him it is only an order and a *priority of nature*, whereas with us there is a *priority of time*. It is therefore not to be wondered at that he who penetrates all things at one stroke should always strike true at the outset; and it must not be said that he succeeds without the guidance of any cognition. On the contrary, it is because his knowledge is perfect that his voluntary actions are also perfect.

193. Up to now I have shown that the Will of God is not independent of the rules of Wisdom, although indeed it is a matter for surprise that one should have been constrained to argue about it, and to do battle for a truth so great and so well established. But it is hardly less surprising that there should be people who believe that God only half observes these rules, and does not choose the best, although his wisdom causes him to recognize it; and, in a word, that there should be writers who hold that God could have done better. That is more or less the error of the famous Alfonso, King of Castile, who was elected King of the Romans by certain Electors, and originated the astronomical tables that bear his name. This prince is

reported to have said that if God in making the world had consulted him he would have given God good advice. Apparently the Ptolemaic system, which prevailed at that time, was displeasing to him. He believed therefore that something better planned could have been made, and he was right. But if he had known the system of Copernicus, with the discoveries of Kepler, now extended by knowledge of the gravity of the planets, he would indeed have confessed that the contrivance of the true system is marvellous. We see, therefore, that here the question concerned the more or less only; Alfonso maintained that better could have been done, and his opinion was censured by everyone.

194. Yet philosophers and theologians dare to support dogmatically such a belief; and I have many times wondered that gifted and pious persons should have been capable of setting bounds to the goodness and the perfection of God. For to assert that he knows what is best, that he can do it and that he does it not, is to avow that it rested with his will only to make the world better than it is; but that is what one calls lacking goodness. It is acting against that axiom already quoted: *Minus bonum habet rationem mali*. If some adduce experience to prove that God could have done better, they set themselves up as ridiculous critics of his works. To such will be given the answer given to all those who criticize God's course of action, and who from this same assumption, that is, the alleged defects of the world, would infer that there is an evil God, or at least a God neutral between good and evil. And if we hold the same opinion as King Alfonso, we shall, I say, receive this answer: You have known the world only since the day before yesterday, you see scarce farther than your nose, and you carp at the world. Wait until you know more of the world and consider therein especially the parts which present a complete whole (as do organic bodies); and you will find there a contrivance and a beauty transcending all imagination. Let us thence draw conclusions as to the wisdom and the goodness of the author of

things, even in things that we know not. We find in the universe some things which are not pleasing to us; but let us be aware that it is not made for us alone. It is nevertheless made for us if we are wise: it will serve us if we use it for our service; we shall be happy in it if we wish to be.

195. Someone will say that it is impossible to produce the best, because there is no perfect creature, and that it is always possible to produce one which would be more perfect. I answer that what can be said of a creature or of a particular substance, which can always be surpassed by another, is not to be applied to the universe, which, since it must extend through all future eternity, is an infinity. Moreover, there is an infinite number of creatures in the smallest particle of matter, because of the actual division of the *continuum* to infinity. And infinity, that is to say, the accumulation of an infinite number of substances, is, properly speaking, not a whole any more than the infinite number itself, whereof one cannot say whether it is even or uneven. That is just what serves to confute those who make of the world a God, or who think of God as the Soul of the world; for the world or the universe cannot be regarded as an animal or as a substance.

196. It is therefore not a question of a creature, but of the universe; and the adversary will be obliged to maintain that one possible universe may be better than the other, to infinity; but there he would be mistaken, and it is that which he cannot prove. If this opinion were true, it would follow that God had not produced any universe at all: for he is incapable of acting without reason, and that would be even acting against reason. It is as if one were to suppose that God had decreed to make a material sphere, with no reason for making it of any particular size. This decree would be useless, it would carry with it that which would prevent its effect. It would be quite another matter if God decreed to draw from a given point one straight line to another given straight line, without any determination of the angle, either

in the decree or in its circumstances. For in this case the determination would spring from the nature of the thing, the line would be perpendicular, and the angle would be right, since that is all that is determined and distinguishable. It is thus one must think of the creation of the best of all possible universes, all the more since God not only decrees to create a universe, but decrees also to create the best of all. For God decrees nothing without knowledge, and he makes no separate decrees, which would be nothing but antecedent acts of will: and these we have sufficiently explained, distinguishing them from genuine decrees.

197. M. Diroys, whom I knew in Rome, theologian to Cardinal d'Estrées, wrote a book entitled *Proofs and Assumptions in Favour of the Christian Religion*, published in Paris in the year 1683. M. Bayle (*Reply to the Questions of a Provincial*, vol. III, ch. 165,) recounts this objection brought up by M. Diroys: 'There is one more difficulty', he says, 'which it is no less important to meet than those given earlier, since it causes more trouble to those who judge goods and evils by considerations founded on the purest and most lofty maxims. This is that God being the supreme wisdom and goodness, it seems to them that he ought to do all things as wise and virtuous persons would wish them to be done, following the rules of wisdom and of goodness which God has imprinted in them, and as they would be obliged themselves to do these things if they depended upon them. Thus, seeing that the affairs of the world do not go so well as, in their opinion, they might go, and as they would go if they interfered themselves, they conclude that God, who is infinitely better and wiser than they, or rather wisdom and goodness itself, does not concern himself with these affairs.'

198. M. Diroys makes some apt remarks concerning this, which I will not repeat, since I have sufficiently answered the objection in more than one passage, and that has been the chief end of all my discourse. But he makes

one assertion with which I cannot agree. He claims that the objection proves too much. One must again quote his own words with M. Bayle,: ‘If it does not behove the supreme Wisdom and Goodness to fail to do what is best and most perfect, it follows that all Beings are eternally, immutably and essentially as perfect and as good as they can be, since nothing can change except by passing either from a state less good to a better, or from a better to a less good. Now that cannot happen if it does not behove God to fail to do that which is best and most perfect, when he can do it. It will therefore be necessary that all beings be eternally and essentially filled with a knowledge and a virtue as perfect as God can give them. Now all that which is eternally and essentially as perfect as God can make it proceeds essentially from him; in a word, is eternally and essentially good as he is, and consequently it is God, as he is. That is the bearing of this maxim, that it is repugnant to supreme justice and goodness not to make things as good and perfect as they can be. For it is essential to essential wisdom and goodness to banish all that is repugnant to it altogether. One must therefore assert as a primary truth concerning the conduct of God in relation to creatures that there is nothing repugnant to this goodness and this wisdom in making things less perfect than they could be, or in permitting the goods that it has produced either completely to cease to be or to change and deteriorate. For it causes no offence to God that there should be other Beings than he, that is beings who can be not what they are, and do not what they do or do what they do not.’

199. M. Bayle calls this answer paltry, but I find his counter-objection involved. M. Bayle will have those who are for the two principles to take their stand chiefly on the assumption of the supreme freedom of God: for if he were compelled to produce all that which he can, he would produce also sins and sorrows. Thus the Dualists could from the existence of evil conclude nothing contrary to the oneness of the principle, if this principle

were as much inclined to evil as to good. There M. Bayle carries the notion of freedom too far: for even though God be supremely free, it does not follow that he maintains an indifference of equipoise: and even though he be inclined to act, it does not follow that he is compelled by this inclination to produce all that which he can. He will produce only that which he wills, for his inclination prompts him to good. I admit the supreme freedom of God, but I do not confuse it with indifference of equipoise, as if he could act without reason. M. Diroys therefore imagines that the Dualists, in their insistence that the single good principle produce no evil, ask too much; for by the same reason, according to M. Diroys, they ought also to ask that he should produce the greatest good, the less good being a kind of evil. I hold that the Dualists are wrong in respect of the first point, and that they would be right in respect of the second, where M. Diroys blames them without cause; or rather that one can reconcile the evil, or the less good, in some parts with the best in the whole. If the Dualists demanded that God should do the best, they would not be demanding too much. They are mistaken rather in claiming that the best in the whole should be free from evil in the parts, and that therefore what God has made is not the best.

200. But M. Diroys maintains that if God always produces the best he will produce other Gods; otherwise each substance that he produced would not be the best nor the most perfect. But he is mistaken, through not taking into account the order and connexion of things. If each substance taken separately were perfect, all would be alike; which is neither fitting nor possible. If they were Gods, it would not have been possible to produce them. The best system of things will therefore not contain Gods; it will always be a system of bodies (that is, things arranged according to time and place) and of souls which represent and are aware of bodies, and in accordance with which bodies are in great measure directed. So, as the design of a building may be the best of all in respect of its purpose, of

expense and of circumstances; and as an arrangement of some figured representations of bodies which is given to you may be the best that one can find, it is easy to imagine likewise that a structure of the universe may be the best of all, without becoming a god. The connexion and order of things brings it about that the body of every animal and of every plant is composed of other animals and of other plants, or of other living and organic beings; consequently there is subordination, and one body, one substance serves the other: thus their perfection cannot be equal.

201. M. Bayle thinks () that M. Diroys has confused two different propositions. According to the one, God must do all things as wise and virtuous persons would wish that they should be done, by the rules of wisdom and of goodness that God has imprinted in them, and as they would be obliged themselves to do them if those things depended upon them. The other is that it is not consistent with supreme wisdom and goodness to fail to do what is best and most perfect. M. Diroys (in M. Bayle's opinion) sets up the first proposition as an objection for himself, and replies to the second. But therein he is justified, as it seems to me. For these two propositions are connected, the second is a result of the first: to do less good than one could is to be lacking in wisdom or in goodness. To be the best, and to be desired by those who are most virtuous and wise, comes to the same thing. And it may be said that, if we could understand the structure and the economy of the universe, we should find that it is made and directed as the wisest and most virtuous could wish it, since God cannot fail to do thus. This necessity nevertheless is only of a moral nature: and I admit that if God were forced by a metaphysical necessity to produce that which he makes, he would produce all the possibles, or nothing; and in this sense M. Bayle's conclusion would be fully correct. But as all the possibles are not compatible together in one and the same world-sequence, for that very reason all the possibles cannot be produced, and it must be said that God is

not forced, metaphysically speaking, into the creation of this world. One may say that as soon as God has decreed to create something there is a struggle between all the possibles, all of them laying claim to existence, and that those which, being united, produce most reality, most perfection, most significance carry the day. It is true that all this struggle can only be ideal, that is to say, it can only be a conflict of reasons in the most perfect understanding, which cannot fail to act in the most perfect way, and consequently to choose the best. Yet God is bound by a moral necessity, to make things in such a manner that there can be nothing better: otherwise not only would others have cause to criticize what he makes, but, more than that, he would not himself be satisfied with his work, he would blame himself for its imperfection; and that conflicts with the supreme felicity of the divine nature. This perpetual sense of his own fault or imperfection would be to him an inevitable source of grief, as M. Bayle says on another occasion (p.953).

202. M. Diroys' argument contains a false assumption, in his statement that nothing can change except by passing from a state less good to a better or from a better to a less good; and that thus, if God makes the best, what he has produced cannot be changed: it would be an eternal substance, a god. But I do not see why a thing cannot change its kind in relation to good or evil, without changing its degree. In the transition from enjoyment of music to enjoyment of painting, or *vice versa* from the pleasure of the eyes to that of the ears, the degree of enjoyment may remain the same, the latter gaining no advantage over the former save that of novelty. If the quadrature of the circle should come to pass or (what is the same thing) the circulature of the square, that is, if the circle were changed into a square of the same size, or the square into a circle, it would be difficult to say, on the whole, without having regard to some special use, whether one would have gained or lost. Thus the best may be changed into another which neither yields to it nor

surpasses it: but there will always be an order among them, and that the best order possible. Taking the whole sequence of things, the best has no equal; but one part of the sequence may be equalled by another part of the same sequence. Besides it might be said that the whole sequence of things to infinity may be the best possible, although what exists all through the universe in each portion of time be not the best. It might be therefore that the universe became even better and better, if the nature of things were such that it was not permitted to attain to the best all at once. But these are problems of which it is hard for us to judge.

203. M. Bayle says () that the question whether God could have made things more perfect than he made them is also very difficult, and that the reasons for and against are very strong. But it is, so it seems to me, as if one were to question whether God's actions are consistent with the most perfect wisdom and the greatest goodness. It is a very strange thing, that by changing the terms a little one throws doubt upon what is, if properly understood, as clear as anything can be. The reasons to the contrary have no force, being founded only on the semblance of defects; and M. Bayle's objection, which tends to prove that the law of the best would impose upon God a true metaphysical necessity, is only an illusion that springs from the misuse of terms. M. Bayle formerly held a different opinion, when he commended that of Father Malebranche, which was akin to mine on this subject. But M. Arnauld having written in opposition to Father Malebranche, M. Bayle altered his opinion; and I suppose that his tendency towards doubt, which increased in him with the years, was conducive to that result. M. Arnauld was doubtless a great man, and his authority has great weight: he made sundry good observations in his writings against Father Malebranche, but he was not justified in contesting those of his statements that were akin to mine on the rule of the best.

204. The excellent author of *The Search for Truth*, having passed from philosophy to theology, published finally an admirable treatise on Nature and Grace. Here he showed in his way (as M. Bayle explained in his *Divers Thoughts on the Comet*, ch. 234) that the events which spring from the enforcement of general laws are not the object of a particular will of God. It is true that when one wills a thing one wills also in a sense everything that is necessarily attached to it, and in consequence God cannot will general laws without also willing in a sense all the particular effects that must of necessity be derived from them. But it is always true that these particular events are not willed for their own sake, and that is what is meant by the expression that they are not willed by a *particular* and direct *will*. There is no doubt that when God resolved to act outside himself, he made choice of a manner of action which should be worthy of the supremely perfect Being, that is, which should be infinitely simple and uniform, but yet of an infinite productivity. One may even suppose that this manner of action by *general acts of will* appeared to him preferable — although there must thence result some superfluous events (and even bad if they are taken separately, that is my own addition) — to another manner more composed and more regular; such is Father Malebranche's opinion. Nothing is more appropriate than this assumption (according to the opinion of M. Bayle, when he wrote his *Divers Thoughts on the Comet*) to solve a thousand difficulties which are brought up against divine providence: 'To ask God', he says, 'why he has made things which serve to render men more wicked, that would be to ask why God has carried out his plan (which can only be of infinite beauty) by the simplest and most uniform methods, and why, by a complexity of decrees that would unceasingly cut across one another, he has not prevented the wrong use of man's free will.' He adds 'that miracles being particular acts of will must have an end worthy of God'.

205. On these foundations he makes some good reflexions (ch. 231) concerning the injustice of those who complain of the prosperity of the wicked. ‘I shall have no scruples’, he says, ‘about saying that all those who are surprised at the prosperity of the wicked have pondered very little upon the nature of God, and that they have reduced the obligations of a cause which directs all things, to the scope of a providence altogether subordinate; and that is small-minded. What then! Should God, after having made free causes and necessary causes, in a mixture infinitely well fitted to show forth the wonders of his infinite wisdom, have established laws consistent with the nature of free causes, but so lacking in firmness that the slightest trouble that came upon a man would overthrow them entirely, to the ruin of human freedom? A mere city governor will become an object of ridicule if he changes his regulations and orders as often as someone is pleased to murmur against him. And shall God, whose laws concern a good so universal that all of the world that is visible to us perchance enters into it as no more than a trifling accessary, be bound to depart from his laws, because they to-day displease the one and to-morrow the other? Or again because a superstitious person, deeming wrongly that a monstrosity presages something deadly, proceeds from his error to a criminal sacrifice? Or because a good soul, who yet does not value virtue highly enough to believe that to have none is punishment enough in itself, is shocked that a wicked man should become rich and enjoy vigorous health? Can one form any falser notions of a universal providence? Everyone agrees that this law of nature, the strong prevails over the weak, has been very wisely laid down, and that it would be absurd to maintain that when a stone falls on a fragile vase which is the delight of its owner, God should depart from this law in order to spare that owner vexation. Should one then not confess that it is just as absurd to maintain that God must depart from the same law to prevent a wicked man from growing rich at the expense of a good man? The

more the wicked man sets himself above the promptings of conscience and of honour, the more does he exceed the good man in strength, so that if he comes to grips with the good man he must, according to the course of nature, ruin him. If, moreover, they are both engaged in the business of finance, the wicked man must, according to the same course of nature, grow richer than the good man, just as a fierce fire consumes more wood than a fire of straw. Those who would wish sickness for a wicked man are sometimes as unfair as those who would wish that a stone falling on a glass should not break it: for his organs being arranged as they are, neither the food that he takes nor the air that he breathes can, according to natural laws, be detrimental to his health. Therefore those who complain about his health complain of God's failure to violate the laws which he has established. And in this they are all the more unfair because, through combinations and concatenations which were in the power of God alone, it happens often enough that the course of nature brings about the punishment of sin.'

206. It is a thousand pities that M. Bayle so soon quitted the way he had so auspiciously begun, of reasoning on behalf of providence: for his work would have been fruitful, and in saying fine things he would have said good things as well. I agree with Father Malebranche that God does things in the way most worthy of him. But I go a little further than he, with regard to 'general and particular acts of will'. As God can do nothing without reasons, even when he acts miraculously, it follows that he has no will about individual events but what results from some general truth or will. Thus I would say that God never has a *particular will* such as this Father implies, that is to say, *a particular primitive will*.

207. I think even that miracles have nothing to distinguish them from other events in this regard: for reasons of an order superior to that of Nature prompt God to perform them. Thus I would not say, with this Father, that

God departs from general laws whenever order requires it: he departs from one law only for another law more applicable, and what order requires cannot fail to be in conformity with the rule of order, which is one of the general laws. The distinguishing mark of miracles (taken in the strictest sense) is that they cannot be accounted for by the natures of created things. That is why, should God make a general law causing bodies to be attracted the one to the other, he could only achieve its operation by perpetual miracles. And likewise, if God willed that the organs of human bodies should conform to the will of the soul, according to the *system of occasional causes*, this law also would come into operation only through perpetual miracles.

208. Thus one must suppose that, among the general rules which are not absolutely necessary, God chooses those which are the most natural, which it is easiest to explain, and which also are of greatest service for the explanation of other things. That is doubtless the conclusion most excellent and most pleasing; and even though the System of Pre-established Harmony were not necessary otherwise, because it banishes superfluous miracles, God would have chosen it as being the most harmonious. The ways of God are those most simple and uniform: for he chooses rules that least restrict one another. They are also the most *productive* in proportion to the *simplicity of ways and means*. It is as if one said that a certain house was the best that could have been constructed at a certain cost. One may, indeed, reduce these two conditions, simplicity and productivity, to a single advantage, which is to produce as much perfection as is possible: thus Father Malebranche's system in this point amounts to the same as mine. Even if the effect were assumed to be greater, but the process less simple, I think one might say that, when all is said and done, the effect itself would be less great, taking into account not only the final effect but also the mediate effect. For the wisest mind so acts, as far as it is possible, that the

means are also in a sense *ends*, that is, they are desirable not only on account of what they do, but on account of what they are. The more intricate processes take up too much ground, too much space, too much place, too much time that might have been better employed.

209. Now since everything resolves itself into this greatest perfection, we return to my law of the best. For perfection includes not only the *moral good* and the *physical good* of intelligent creatures, but also the good which is purely *metaphysical*, and concerns also creatures devoid of reason. It follows that the evil that is in rational creatures happens only by concomitance, not by antecedent will but by a consequent will, as being involved in the best possible plan; and the metaphysical good which includes everything makes it necessary sometimes to admit physical evil and moral evil, as I have already explained more than once. It so happens that the ancient Stoics were not far removed from this system. M. Bayle remarked upon this himself in his *Dictionary* in the article on 'Chrysippus', rem. T. It is of importance to give his own words, in order sometimes to face him with his own objections and to bring him back to the fine sentiments that he had formerly pronounced: 'Chrysippus', he says (), 'in his work on Providence examined amongst other questions this one: Did the nature of things, or the providence that made the world and the human kind, make also the diseases to which men are subject? He answers that the chief design of Nature was not to make them sickly, that would not be in keeping with the cause of all good; but Nature, in preparing and producing many great things excellently ordered and of great usefulness, found that some drawbacks came as a result, and thus these were not in conformity with the original design and purpose; they came about as a sequel to the work, they existed only as consequences. For the formation of the human body, Chrysippus said, the finest idea as well as the very utility of the work

demanded that the head should be composed of a tissue of thin, fine bones; but because of that it was bound to have the disadvantage of not being able to resist blows. Nature made health, and at the same time it was necessary by a kind of concomitance that the source of diseases should be opened up. The same thing applies with regard to virtue; the direct action of Nature, which brought it forth, produced by a counter stroke the brood of vices. I have not translated literally, for which reason I give here the actual Latin of Aulus Gellius, for the benefit of those who understand that language (Aul. Gellius, lib. 6, ca): "Idem Chrysippus in eod. lib. (quarto, περι προνοιας) tractat consideratque, dignumque esse id quaeri putat, ει ʽαι των ανθρωπων νοσοι κατα φυσιν γιγνονται. Id est, naturane ipsa rerum, vel providentia quae compagem hanc mundi et genus hominum fecit, morbos quoque et debilitates et aegritudines corporum, quas patiuntur homines, fecerit. Existimat autem non fuisse hoc principale naturae consilium, ut faceret homines morbis obnoxios. Nunquam enim hoc convenisse naturae auctori parentique rerum omnium bonarum. Sed quum multa, inquit, atque magna gigneret, pareretque aptissima et utilissima, alia quoque simul agnata sunt incommoda iis ipsis, quae faciebat, cohaerentia: eaque non per naturam, sed per sequelas quasdam necessarias facta dicit, quod ipse appellat κατα παρακολουθησιν. Sicut, inquit, quum corpora hominum natura fingeret, ratio subtilior et utilitas ipsa operis postulavit ut tenuissimis minutisque ossiculis caput compingeret. Sed hanc utilitatem rei majoris alia quaedam incommoditas extrinsecus consecuta est, ut fieret caput tenuiter munitum et ictibus offensionibusque parvis fragile. Proinde morbi quoque et aegritudines partae sunt, dum salus paritur. Sic Hercle, inquit, dum virtus hominibus per consilium naturae gignitur, vitia ibidem per affinitatem contrariam nata sunt." I do not think that a pagan could have said anything more reasonable, considering his ignorance of the first man's fall, the knowledge of which has only reached us through revelation, and which

indeed is the true cause of our miseries. If we had sundry like extracts from the works of Chrysippus, or rather if we had his works, we should have a more favourable idea than we have of the beauty of his genius.'

210. Let us now see the reverse of the medal in the altered M. Bayle. After having quoted in his *Reply to the Questions of a Provincial* (vol. III, ch. 155,) these words of M. Jacquelot, which are much to my liking: 'To change the order of the universe is something of infinitely greater consequence than the prosperity of a good man,' he adds: 'This thought has something dazzling about it: Father Malebranche has placed it in the best possible light; and he has persuaded some of his readers that a system which is simple and very productive is more consistent with God's wisdom than a system more composite and less productive in proportion, but more capable of averting irregularities. M. Bayle was one of those who believed that Father Malebranche in that way gave a wonderful solution.' (It is M. Bayle himself speaking.) 'But it is almost impossible to be satisfied with it after having read M. Arnauld's books against this system, and after having contemplated the vast and boundless idea of the supremely perfect Being. This idea shows us that nothing is easier for God than to follow a plan which is simple, productive, regular and opportune for all creatures simultaneously.'

211. While I was in France I showed to M. Arnauld a dialogue I had composed in Latin on the cause of evil and the justice of God; it was not only before his disputes with Father Malebranche, but even before the book on *The Search for Truth* appeared. That principle which I uphold here, namely that sin had been permitted because it had been involved in the best plan for the universe, was already applied there; and M. Arnauld did not seem to be startled by it. But the slight contentions which he has since had with Father Malebranche have given him cause to examine this subject with closer attention, and to be more severe in his judgement thereof. Yet I am

not altogether pleased with M. Bayle's manner of expression here on this subject, and I am not of the opinion 'that a more composite and less productive plan might be more capable of averting irregularities'. Rules are the expression of general will: the more one observes rules, the more regularity there is; simplicity and productivity are the aim of rules. I shall be met with the objection that a uniform system will be free from irregularities. I answer that it would be an irregularity to be too uniform, that would offend against the rules of harmony. *Et citharoedus Ridetur chorda qui semper oberrat eadem*. I believe therefore that God can follow a simple, productive, regular plan; but I do not believe that the best and the most regular is always opportune for all creatures simultaneously; and I judge *a posteriori*, for the plan chosen by God is not so. I have, however, also shown this *a priori* in examples taken from mathematics, and I will presently give another here. An Origenist who maintains that all rational creatures become happy in the end will be still easier to satisfy. He will say, in imitation of St. Paul's saying about the sufferings of this life, that those which are finite are not worthy to be compared with eternal bliss.

212. What is deceptive in this subject, as I have already observed, is that one feels an inclination to believe that what is the best in the whole is also the best possible in each part. One reasons thus in geometry, when it is a question *de maximis et minimis*. If the road from A to B that one proposes to take is the shortest possible, and if this road passes by C, then the road from A to C, part of the first, must also be the shortest possible. But the inference from *quantity* to *quality* is not always right, any more than that which is drawn from equals to similars. For *equals* are those whose quantity is the same, and *similars* are those not differing according to qualities. The late Herr Sturm, a famous mathematician in Altorf, while in Holland in his youth published there a small book under the title of *Euclides Catholicus*. Here he endeavoured to give exact and general rules in subjects not

mathematical, being encouraged in the task by the late Herr Erhard Weigel, who had been his tutor. In this book he transfers to similars what Euclid had said of equals, and he formulates this axiom: *Si similibus addas similia, tota sunt similia*. But so many limitations were necessary to justify this new rule, that it would have been better, in my opinion, to enounce it at the outset with a reservation, by saying, *Si similibus similia addas similiter, tota sunt similia*. Moreover, geometricians often require *non tantum similia, sed et similiter posita*.

213. This difference between quantity and quality appears also in our case. The part of the shortest way between two extreme points is also the shortest way between the extreme points of this part; but the part of the best Whole is not of necessity the best that one could have made of this part. For the part of a beautiful thing is not always beautiful, since it can be extracted from the whole, or marked out within the whole, in an irregular manner. If goodness and beauty always lay in something absolute and uniform, such as extension, matter, gold, water, and other bodies assumed to be homogeneous or similar, one must say that the part of the good and the beautiful would be beautiful and good like the whole, since it would always have resemblance to the whole: but this is not the case in things that have mutual relations. An example taken from geometry will be appropriate to explain my idea.

214. There is a kind of geometry which Herr Jung of Hamburg, one of the most admirable men of his time, called ‘empiric’. It makes use of conclusive experiments and proves various propositions of Euclid, but especially those which concern the equality of two figures, by cutting the one in pieces, and putting the pieces together again to make the other. In this manner, by cutting carefully in parts the squares on the two sides of the right-angled triangle, and arranging these parts carefully, one makes from them the square on the hypotenuse; that is demonstrating empirically the

47th proposition of the first book of Euclid. Now supposing that some of these pieces taken from the two smaller squares are lost, something will be lacking in the large square that is to be formed from them; and this defective combination, far from pleasing, will be disagreeably ugly. If then the pieces that remained, composing the faulty combination, were taken separately without any regard to the large square to whose formation they ought to contribute, one would group them together quite differently to make a tolerably good combination. But as soon as the lost pieces are retrieved and the gap in the faulty combination is filled, there will ensue a beautiful and regular thing, the complete large square: this perfect combination will be far more beautiful than the tolerably good combination which had been made from the pieces one had not mislaid alone. The perfect combination corresponds to the universe in its entirety, and the faulty combination that is a part of the perfect one corresponds to some part of the universe, where we find defects which the Author of things has allowed, because otherwise, if he had wished to re-shape this faulty part and make thereof a tolerably good combination, the whole would not then have been so beautiful. For the parts of the faulty combination, grouped better to make a tolerably good combination, could not have been used properly to form the whole and perfect combination. Thomas Aquinas had an inkling of these things when he said: *ad prudentem gubernatorem pertinet, negligere aliquem defectum bonitatis in parte, ut faciat augmentum bonitatis in toto* (Thom. *Contra Gentiles*, lib. 2, c. 71). Thomas Gatacre, in his Notes on the book of Marcus Aurelius (lib. 5, ca, with M. Bayle), cites also passages from authors who say that the evil of the parts is often the good of the whole.

215. Let us return to M. Bayle's illustrations. He imagines a prince () who is having a city built, and who, in bad taste, aims rather at airs of magnificence therein, and a bold and unusual style of architecture, than at

the provision of conveniences of all kinds for the inhabitants. But if this prince has true magnanimity he will prefer the convenient to the magnificent architecture. That is M. Bayle's judgement. I consider, however, that there are cases where one will justifiably prefer beauty of construction in a palace to the convenience of a few domestics. But I admit that the construction would be bad, however beautiful it might be, if it were a cause of diseases to the inhabitants; provided it was possible to make one that would be better, taking into account beauty, convenience and health all together. It may be, indeed, that one cannot have all these advantages at once. Thus, supposing one wished to build on the northern and more bracing side of the mountain, if the castle were then bound to be of an unendurable construction, one would prefer to make it face southward.

216. M. Bayle raises the further objection, that it is true that our legislators can never invent regulations such as are convenient for all individuals, 'Nulla lex satis commoda omnibus est; id modo quaeritur, si majori parti et in summam prodest. (Cato apud Livium, L. 34, circa init.)' But the reason is that the limited condition of their knowledge compels them to cling to laws which, when all is taken into account, are more advantageous than harmful. Nothing of all that can apply to God, who is as infinite in power and understanding as in goodness and true greatness. I answer that since God chooses the best possible, one cannot tax him with any limitation of his perfections; and in the universe not only does the good exceed the evil, but also the evil serves to augment the good.

217. He observes also that the Stoics derived a blasphemy from this principle, saying that evils must be endured with patience, or that they were necessary, not only to the well-being and completeness of the universe, but also to the felicity, perfection and conservation of God, who directs it. The Emperor Marcus Aurelius gave expression to that in the eighth chapter of the fifth book of his *Meditations*. 'Duplici ratione', he says, 'diligas oportet,

quidquid evenerit tibi; altera quod tibi natum et tibi coordinatum et ad te quodammodo affectum est; altera quod universi gubernatori prosperitatis et consummationis atque adeo permansionis ipsius procurandae (της ευοδιας και της συντελειας και της συμμονης αυτης) ex parte causa est.' This precept is not the most reasonable of those stated by that great emperor. A *diligas oportet* (στεργειν χρη) is of no avail; a thing does not become pleasing just because it is necessary, and because it is destined for or attached to someone: and what for me would be an evil would not cease to be such because it would be my master's good, unless this good reflected back on me. One good thing among others in the universe is that the general good becomes in reality the individual good of those who love the Author of all good. But the principal error of this emperor and of the Stoics was their assumption that the good of the universe must please God himself, because they imagined God as the soul of the world. This error has nothing in common with my dogma, according to which God is *Intelligentia extramundana*, as Martianus Capella calls him, or rather *supramundana*. Further, he acts to do good, and not to receive it. *Melius est dare quam accipere*; his bliss is ever perfect and can receive no increase, either from within or from without.

218. I come now to the principal objection M. Bayle, after M. Arnauld, brings up against me. It is complicated: they maintain that God would be under compulsion, that he would act of necessity, if he were bound to create the best; or at least that he would have been lacking in power if he could not have found a better expedient for excluding sins and other evils. That is in effect denying that this universe is the best, and that God is bound to insist upon the best. I have met this objection adequately in more than one passage: I have proved that God cannot fail to produce the best; and from that assumption it follows that the evils we experience could not have been reasonably excluded from the universe, since they are there. Let us see,

however, what these two excellent men bring up, or rather let us see what M. Bayle's objection is, for he professes to have profited by the arguments of M. Arnauld.

219. 'Would it be possible', he says, *Reply to the Questions of a Provincial*, vol. III, ch. 158,, 'that a nature whose goodness, holiness, wisdom, knowledge and power are infinite, who loves virtue supremely, and hates vice supremely, as our clear and distinct idea of him shows us, and as well-nigh every page of Scripture assures us, could have found in virtue no means fitting and suited for his ends? Would it be possible that vice alone had offered him this means? One would have thought on the contrary that nothing beseemed this nature more than to establish virtue in his work to the exclusion of all vice.' M. Bayle here exaggerates things. I agree that some vice was connected with the best plan of the universe, but I do not agree with him that God could not find in virtue any means suited for his ends. This objection would have been valid if there were no virtue, if vice took its place everywhere. He will say it suffices that vice prevails and that virtue is trifling in comparison. But I am far from agreeing with him there, and I think that in reality, properly speaking, there is incomparably more moral good than moral evil in rational creatures; and of these we have knowledge of but few.

220. This evil is not even so great in men as it is declared to be. It is only people of a malicious disposition or those who have become somewhat misanthropic through misfortunes, like Lucian's Timon, who find wickedness everywhere, and who poison the best actions by the interpretations they give to them. I speak of those who do it in all seriousness, to draw thence evil conclusions, by which their conduct is tainted; for there are some who only do it to show off their own acumen. People have found that fault in Tacitus, and that again is the criticism M. Descartes (in one of his letters) makes of Mr. Hobbes's book *De Cive*, of

which only a few copies had at that time been printed for distribution among friends, but to which some notes by the author were added in the second edition which we have. For although M. Descartes acknowledges that this book is by a man of talent, he observes therein some very dangerous principles and maxims, in the assumption there made that all men are wicked, or the provision of them with motives for being so. The late Herr Jacob Thomasius said in his admirable *Tables of Practical Philosophy* that the πρωτον ψευδος, the primary cause of errors in this book by Mr. Hobbes, was that he took *statum legalem pro naturali*, that is to say that the corrupt state served him as a gauge and rule, whereas it is the state most befitting human nature which Aristotle had had in view. For according to Aristotle, that is termed *natural* which conforms most closely to the perfection of the nature of the thing; but Mr. Hobbes applies the term *natural state* to that which has least art, perhaps not taking into account that human nature in its perfection carries art with it. But the question of name, that is to say, of what may be called natural, would not be of great importance were it not that Aristotle and Hobbes fastened upon it the notion of natural right, each one following his own signification. I have said here already that I found in the book on the Falsity of human Virtues the same defect as M. Descartes found in Mr. Hobbes's *De Cive*.

221. But even if we assume that vice exceeds virtue in the human kind, as it is assumed the number of the damned exceeds that of the elect, it by no means follows that vice and misery exceed virtue and happiness in the universe: one should rather believe the opposite, because the City of God must be the most perfect of all possible states, since it was formed and is perpetually governed by the greatest and best of all Monarchs. This answer confirms the observation I made earlier, when speaking of the conformity of faith with reason, namely, that one of the greatest sources of fallacy in the objections is the confusion of the apparent with the real. And here by the

apparent I mean not simply such as would result from an exact discussion of facts, but that which has been derived from the small extent of our experiences. It would be senseless to try to bring up appearances so imperfect, and having such slight foundation, in opposition to the proofs of reason and the revelations of faith.

222. Finally, I have already observed that love of virtue and hatred of vice, which tend in an undefined way to bring virtue into existence and to prevent the existence of vice, are only antecedent acts of will, such as is the will to bring about the happiness of all men and to save them from misery. These acts of antecedent will make up only a portion of all the antecedent will of God taken together, whose result forms the consequent will, or the decree to create the best. Through this decree it is that love for virtue and for the happiness of rational creatures, which is undefined in itself and goes as far as is possible, receives some slight limitations, on account of the heed that must be paid to good in general. Thus one must understand that God loves virtue supremely and hates vice supremely, and that nevertheless some vice is to be permitted.

223. M. Arnauld and M. Bayle appear to maintain that this method of explaining things and of establishing a best among all the plans for the universe, one such as may not be surpassed by any other, sets a limit to God's power. 'Have you considered', says M. Arnauld to Father Malebranche (in his *Reflexions on the New System of Nature and Grace*, vol. II,), 'that in making such assumptions you take it upon yourself to subvert the first article of the creed, whereby we make profession of believing in God the Father Almighty?' He had said already (): 'Can one maintain, without trying to blind oneself, that a course of action which could not fail to have this grievous result, namely, that the majority of men perish, bears the stamp of God's goodness more than a different course of action, which would have caused, if God had followed it, the salvation of all

men?' And, as M. Jacquelot does not differ from the principles I have just laid down, M. Bayle raises like objections in his case (*Reply to the Questions of a Provincial*, vol. III, ch. 151,): 'If one adopts such explanations', he says, 'one sees oneself constrained to renounce the most obvious notions on the nature of the supremely perfect Being. These teach us that all things not implying contradiction are possible for him, that consequently it is possible for him to save people whom he does not save: for what contradiction would result supposing the number of the elect were greater than it is? They teach us besides that, since he is supremely happy, he has no will which he cannot carry out. How, then, shall we understand that he wills to save all men and that he cannot do so? We sought some light to help us out of the perplexities we feel in comparing the idea of God with the state of the human kind, and lo! we are given elucidations that cast us into darkness more dense.'

224. All these obstacles vanish before the exposition I have just given. I agree with M. Bayle's principle, and it is also mine, that everything implying no contradiction is possible. But as for me, holding as I do that God did the best that was possible, or that he could not have done better than he has done, deeming also that to pass any other judgement upon his work in its entirety would be to wrong his goodness or his wisdom, I must say that to make something which surpasses in goodness the best itself, that indeed would imply contradiction. That would be as if someone maintained that God could draw from one point to another a line shorter than the straight line, and accused those who deny this of subverting the article of faith whereby we believe in God the Father Almighty.

225. The infinity of possibles, however great it may be, is no greater than that of the wisdom of God, who knows all possibles. One may even say that if this wisdom does not exceed the possibles extensively, since the objects of the understanding cannot go beyond the possible, which in a sense is

alone intelligible, it exceeds them intensively, by reason of the infinitely infinite combinations it makes thereof, and its many deliberations concerning them. The wisdom of God, not content with embracing all the possibles, penetrates them, compares them, weighs them one against the other, to estimate their degrees of perfection or imperfection, the strong and the weak, the good and the evil. It goes even beyond the finite combinations, it makes of them an infinity of infinites, that is to say, an infinity of possible sequences of the universe, each of which contains an infinity of creatures. By this means the divine Wisdom distributes all the possibles it had already contemplated separately, into so many universal systems which it further compares the one with the other. The result of all these comparisons and deliberations is the choice of the best from among all these possible systems, which wisdom makes in order to satisfy goodness completely; and such is precisely the plan of the universe as it is. Moreover, all these operations of the divine understanding, although they have among them an order and a priority of nature, always take place together, no priority of time existing among them.

226. The careful consideration of these things will, I hope, induce a different idea of the greatness of the divine perfections, and especially of the wisdom and goodness of God, from any that can exist in the minds of those who make God act at random, without cause or reason. And I do not see how they could avoid falling into an opinion so strange, unless they acknowledged that there are reasons for God's choice, and that these reasons are derived from his goodness: whence it follows of necessity that what was chosen had the advantage of goodness over what was not chosen, and consequently that it is the best of all the possibles. The best cannot be surpassed in goodness, and it is no restriction of the power of God to say that he cannot do the impossible. Is it possible, said M. Bayle, that there is no better plan than that one which God carried out? One answers that it is

very possible and indeed necessary, namely that there is none: otherwise God would have preferred it.

227. It seems to me that I have proved sufficiently that among all the possible plans of the universe there is one better than all the rest, and that God has not failed to choose it. But M. Bayle claims to infer thence that God is therefore not free. This is how he speaks on that question (*ubi supra*, ch. 151,): 'I thought to argue with a man who assumed as I do that the goodness and the power of God are infinite, as well as his wisdom; and now I see that in reality this man assumes that God's goodness and power are enclosed within rather narrow bounds.' As to that, the objection has already been met: I set no bounds to God's power, since I recognize that it extends *ad maximum, ad omnia*, to all that implies no contradiction; and I set none to his goodness, since it attains to the best, *ad optimum*. But M. Bayle goes on: 'There is therefore no freedom in God; he is compelled by his wisdom to create, and then to create precisely such a work, and finally to create it precisely in such ways. These are three servitudes which form a more than Stoic *fatum*, and which render impossible all that is not within their sphere. It seems that, according to this system, God could have said, even before shaping his decrees: I cannot save such and such a man, nor condemn such and such another, *quippe vetor fatis*, my wisdom permits it not.'

228. I answer that it is goodness which prompts God to create with the purpose of communicating himself; and this same goodness combined with wisdom prompts him to create the best: a best that includes the whole sequence, the effect and the process. It prompts him thereto without compelling him, for it does not render impossible that which it does not cause him to choose. To call that *fatum* is taking it in a good sense, which is not contrary to freedom: *fatum* comes from *fari*, to speak, to pronounce; it signifies a judgement, a decree of God, the award of his wisdom. To say that one cannot do a thing, simply because one does not will it, is to misuse

terms. The wise mind wills only the good: is it then a servitude when the will acts in accordance with wisdom? And can one be less a slave than to act by one's own choice in accordance with the most perfect reason? Aristotle used to say that that man is in a natural servitude (*natura servus*) who lacks guidance, who has need of being directed. Slavery comes from without, it leads to that which offends, and especially to that which offends with reason: the force of others and our own passions enslave us. God is never moved by anything outside himself, nor is he subject to inward passions, and he is never led to that which can cause him offence. It appears, therefore, that M. Bayle gives odious names to the best things in the world, and turns our ideas upside-down, applying the term slavery to the state of the greatest and most perfect freedom.

229. He had also said not long before (ch. 151,): 'If virtue, or any other good at all, had been as appropriate as vice for the Creator's ends, vice would not have been given preference; it must therefore have been the only means that the Creator could have used; it was therefore employed purely of necessity. As therefore he loves his glory, not with a freedom of indifference, but by necessity, he must by necessity love all the means without which he could not manifest his glory. Now if vice, as vice, was the only means of attaining to this end, it will follow that God of necessity loves vice as vice, a thought which can only inspire us with horror; and he has revealed quite the contrary to us.' He observes at the same time that certain doctors among the Supralapsarians (like Rutherford, for example) denied that God wills sin as sin, whilst they admitted that he wills sin permissively in so far as it is punishable and pardonable. But he urges in objection, that an action is only punishable and pardonable in so far as it is vicious.

230. M. Bayle makes a false assumption in these words that we have just read, and draws from them false conclusions. It is not true that God loves

his glory by necessity, if thereby it is understood that he is led by necessity to acquire his glory through his creatures. For if that were so, he would acquire his glory always and everywhere. The decree to create is free: God is prompted to all good; the good, and even the best, inclines him to act; but it does not compel him, for his choice creates no impossibility in that which is distinct from the best; it causes no implication of contradiction in that which God refrains from doing. There is therefore in God a freedom that is exempt not only from constraint but also from necessity. I mean this in respect of metaphysical necessity; for it is a moral necessity that the wisest should be bound to choose the best. It is the same with the means which God chooses to attain his glory. And as for vice, it has been shown in preceding pages that it is not an object of God's decree as *means*, but as *conditio sine qua non*, and that for that reason alone it is permitted. One is even less justified in saying that vice is *the only means*; it would be at most one of the means, but one of the least among innumerable others.

231. 'Another frightful consequence,' M. Bayle goes on, 'the fatality of all things, ensues: God will not have been free to arrange events in a different way, since the means he chose to show forth his glory was the only means befitting his wisdom.' This so-called fatality or necessity is only moral, as I have just shown: it does not affect freedom; on the contrary, it assumes the best use thereof; it does not render impossible the objects set aside by God's choice. 'What, then, will become', he adds, 'of man's free will? Will there not have been necessity and fatality for Adam to sin? For if he had not sinned, he would have overthrown the sole plan that God had of necessity created.' That is again a misuse of terms. Adam sinning freely was seen of God among the ideas of the possibles, and God decreed to admit him into existence as he saw him. This decree does not change the nature of the objects: it does not render necessary that which was contingent in itself, or impossible that which was possible.

232. M. Bayle goes on (): ‘The subtle Scotus asserts with much discernment that if God had no freedom of indifference no creature could have this kind of freedom.’ I agree provided it is not meant as an indifference of equipoise, where there is no reason inclining more to one side than the other. M. Bayle acknowledges (farther on in chapter 168,) that what is termed indifference does not exclude prevenient inclinations and pleasures. It suffices therefore that there be no metaphysical necessity in the action which is termed free, that is to say, it suffices that a choice be made between several courses possible.

233. He goes on again in the said chapter 157,: ‘If God is not determined to create the world by a free motion of his goodness, but by the interests of his glory, which he loves by necessity, and which is the only thing he loves, for it is not different from his substance; and if the love that he has for himself has compelled him to show forth his glory through the most fitting means, and if the fall of man was this same means, it is evident that this fall happened entirely by necessity and that the obedience of Eve and Adam to God’s commands was impossible.’ Still the same error. The love that God bears to himself is essential to him, but the love for his glory, or the will to acquire his glory, is not so by any means: the love he has for himself did not impel him by necessity to actions without; they were free; and since there were possible plans whereby the first parents should not sin, their sin was therefore not necessary. Finally, I say in effect what M. Bayle acknowledges here, ‘that God resolved to create the world by a free motion of his goodness’; and I add that this same motion prompted him to the best.

234. The same answer holds good against this statement of M. Bayle’s (ch. 165,): ‘The means most appropriate for attaining an end is of necessity one alone’ (that is very well said, at least for the cases where God has chosen). ‘Therefore if God was prompted irresistibly to employ this means,

he employed it by necessity.' (He was certainly prompted thereto, he was determined, or rather he determined himself thereto: but that which is certain is not always necessary, or altogether irresistible; the thing might have gone otherwise, but that did not happen, and with good reason. God chose between different courses all possible: thus, metaphysically speaking, he could have chosen or done what was not the best; but he could not morally speaking have done so. Let us make use of a comparison from geometry. The best way from one point to another (leaving out of account obstacles and other considerations accidental to the medium) is one alone: it is that one which passes by the shortest line, which is the straight line. Yet there are innumerable ways from one point to another. There is therefore no necessity which binds me to go by the straight line; but as soon as I choose the best, I am determined to go that way, although this is only a moral necessity in the wise. That is why the following conclusions fail.) 'Therefore he could only do that which he did. Therefore that which has not happened or will never happen is absolutely impossible.' (These conclusions fail, I say: for since there are many things which have never happened and never will happen, and which nevertheless are clearly conceivable, and imply no contradiction, how can one say they are altogether impossible? M. Bayle has refuted that himself in a passage opposing the Spinozists, which I have already quoted here, and he has frequently acknowledged that there is nothing impossible except that which implies contradiction: now he changes style and terminology.) 'Therefore Adam's perseverance in innocence was always impossible; therefore his fall was altogether inevitable, and even antecedently to God's decree, for it implied contradiction that God should be able to will a thing opposed to his wisdom: it is, after all, the same thing to say, that it is impossible for God, as to say, God could do it, if he so willed, but he cannot will it.' (It is misusing terms in a sense to say here: one can will, one will will; 'can' here

concerns the actions that one does will. Nevertheless it implies no contradiction that God should will — directly or permissively — a thing not implying contradiction, and in this sense it is permitted to say that God can will it.)

235. In a word, when one speaks of the *possibility* of a thing it is not a question of the causes that can bring about or prevent its actual existence: otherwise one would change the nature of the terms, and render useless the distinction between the possible and the actual. This Abelard did, and Wyclif appears to have done after him, in consequence of which they fell needlessly into unsuitable and disagreeable expressions. That is why, when one asks if a thing is possible or necessary, and brings in the consideration of what God wills or chooses, one alters the issue. For God chooses among the possibles, and for that very reason he chooses freely, and is not compelled; there would be neither choice nor freedom if there were but one course possible.

236. One must also answer M. Bayle's syllogisms, so as to neglect none of the objections of a man so gifted: they occur in Chapter 151 of his *Reply to the Questions of a Provincial* (vol. III, p, 901).

FIRST SYLLOGISM

'God can will nothing that is opposed to the necessary love which he has for his wisdom.

'Now the salvation of all men is opposed to the necessary love which God has for his wisdom.

'Therefore God cannot will the salvation of all men.'

The major is self-evident, for one can do nothing whereof the opposite is necessary. But the minor cannot be accepted, for, albeit God loves his wisdom of necessity, the actions whereto his wisdom prompts him cannot but be free, and the objects whereto his wisdom does not prompt him do not cease to be possible. Moreover, his wisdom has prompted him to will the

salvation of all men, but not by a consequent and decretory will. Yet this consequent will, being only a result of free antecedent acts of will, cannot fail to be free also.

SECOND SYLLOGISM

'The work most worthy of God's wisdom involves amongst other things the sin of all men and the eternal damnation of the majority of men.

'Now God wills of necessity the work most worthy of his wisdom.

'He wills therefore of necessity the work that involves amongst other things the sin of all men and the eternal damnation of the majority of men.'

The major holds good, but the minor I deny. The decrees of God are always free, even though God be always prompted thereto by reasons which lie in the intention towards good: for to be morally compelled by wisdom, to be bound by the consideration of good, is to be free; it is not compulsion in the metaphysical sense. And metaphysical necessity alone, as I have observed so many times, is opposed to freedom.

238. I shall not examine the syllogisms that M. Bayle urges in objection in the following chapter (Ch. 152), against the system of the Supralapsarians, and particularly against the oration made by Theodore de Bèze at the Conference of Montbéliard in the year 1586. This conference also only served to increase the acrimony of the parties. 'God created the World to his glory: his glory is not known (according to Bèze), if his mercy and his justice are not declared; for this cause simply by his grace he decreed for some men life eternal, and for others by a just judgement eternal damnation. Mercy presupposes misery, justice presupposes guilt.' (He might have added that misery also supposes guilt.) 'Nevertheless God being good, indeed goodness itself, he created man good and righteous, but unstable, and capable of sinning of his own free will. Man did not fall at random or rashly, or through causes ordained by some other God, as the Manichaeans hold, but by the providence of God; in such a way

notwithstanding, that God was not involved in the fault, inasmuch as man was not constrained to sin.'

239. This system is not of the best conceived: it is not well fitted to show forth the wisdom, the goodness and the justice of God; and happily it is almost abandoned to-day. If there were not other more profound reasons capable of inducing God to permit guilt, the source of misery, there would be neither guilt nor misery in the world, for the reasons alleged here do not suffice. He would declare his mercy better in preventing misery, and he would declare his justice better in preventing guilt, in advancing virtue, in recompensing it. Besides, one does not see how he who not only causes a man to be capable of falling, but who so disposes circumstances that they contribute towards causing his fall, is not culpable, if there are no other reasons compelling him thereto. But when one considers that God, altogether good and wise, must have produced all the virtue, goodness, happiness whereof the best plan of the universe is capable, and that often an evil in some parts may serve the greater good of the whole, one readily concludes that God may have given room for unhappiness, and even permitted guilt, as he has done, without deserving to be blamed. It is the only remedy that supplies what all systems lack, however they arrange the decrees. These thoughts have already been favoured by St. Augustine, and one may say of Eve what the poet said of the hand of Mucius Scaevola:

Si non errasset, fecerat illa minus.

240. I find that the famous English prelate who wrote an ingenious book on the origin of evil, some passages of which were disputed by M. Bayle in the second volume of his *Reply to the Questions of a Provincial*, while disagreeing with some of the opinions that I have upheld here and appearing to resort sometimes to a despotic power, as if the will of God did not follow the rules of wisdom in relation to good or evil, but decreed arbitrarily that such and such a thing must be considered good or evil; and as if even the

will of the creature, in so far as it is free, did not choose because the object appears good to him, but by a purely arbitrary determination, independent of the representation of the object; this bishop, I say, in other passages nevertheless says things which seem more in favour of my doctrine than of what appears contrary thereto in his own. He says that what an infinitely wise and free cause has chosen is better than what it has not chosen. Is not that recognizing that goodness is the object and the reason of his choice? In this sense one will here aptly say:

Sic placuit superis; quaerere plura, nefas.

PART THREE

241. NOW AT last I have disposed of the cause of moral evil; *physical evil*, that is, sorrows, sufferings, miseries, will be less troublesome to explain, since these are results of moral evil. *Poena est malum passionis, quod infligitur ob malum actionis*, according to Grotius. One suffers because one has acted; one suffers evil because one does evil.

Nostrorum causa malorum

Nos sumus.

It is true that one often suffers through the evil actions of others; but when one has no part in the offence one must look upon it as a certainty that these sufferings prepare for us a greater happiness. The question of *physical evil*, that is, of the origin of sufferings, has difficulties in common with that of the origin of *metaphysical evil*, examples whereof are furnished by the monstrosities and other apparent irregularities of the universe. But one must believe that even sufferings and monstrosities are part of order; and it is well to bear in mind not only that it was better to admit these defects and these monstrosities than to violate general laws, as Father Malebranche sometimes argues, but also that these very monstrosities are in the rules, and are in conformity with general acts of will, though we be not capable of discerning this conformity. It is just as sometimes there are appearances of irregularity in mathematics which issue finally in a great order when one has finally got to the bottom of them: that is why I have already in this work observed that according to my principles all individual events, without exception, are consequences of general acts of will.

242. It should be no cause for astonishment that I endeavour to elucidate these things by comparisons taken from pure mathematics, where

everything proceeds in order, and where it is possible to fathom them by a close contemplation which grants us an enjoyment, so to speak, of the vision of the ideas of God. One may propose a succession or series of numbers perfectly irregular to all appearance, where the numbers increase and diminish variably without the emergence of any order; and yet he who knows the key to the formula, and who understands the origin and the structure of this succession of numbers, will be able to give a rule which, being properly understood, will show that the series is perfectly regular, and that it even has excellent properties. One may make this still more evident in lines. A line may have twists and turns, ups and downs, points of reflexion and points of inflexion, interruptions and other variations, so that one sees neither rhyme nor reason therein, especially when taking into account only a portion of the line; and yet it may be that one can give its equation and construction, wherein a geometrician would find the reason and the fittingness of all these so-called irregularities. That is how we must look upon the irregularities constituted by monstrosities and other so-called defects in the universe.

243. In this sense one may apply that fine adage of St. Bernard (E, Ad Eugen. III): ‘Ordinatissimum est, minus interdum ordinate fieri aliquid.’ It belongs to the great order that there should be some small disorder. One may even say that this small disorder is apparent only in the whole, and it is not even apparent when one considers the happiness of those who walk in the ways of order.

244. When I mention monstrosities I include numerous other apparent defects besides. We are acquainted with hardly anything but the surface of our globe; we scarce penetrate into its interior beyond a few hundred fathoms. That which we find in this crust of the globe appears to be the effect of some great upheavals. It seems that this globe was once on fire, and that the rocks forming the base of this crust of the earth are scoria

remaining from a great fusion. In their entrails are found metal and mineral products, which closely resemble those emanating from our furnaces: and the entire sea may be a kind of *oleum per deliquium*, just as tartaric oil forms in a damp place. For when the earth's surface cooled after the great conflagration the moisture that the fire had driven into the air fell back upon the earth, washed its surface and dissolved and absorbed the solid salt that was left in the cinders, finally filling up this great cavity in the surface of our globe, to form the ocean filled with salt water.

245. But, after the fire, one must conclude that earth and water made ravages no less. It may be that the crust formed by the cooling, having below it great cavities, fell in, so that we live only on ruins, as among others Thomas Burnet, Chaplain to the late King of Great Britain, aptly observed. Sundry deluges and inundations have left deposits, whereof traces and remains are found which show that the sea was in places that to-day are most remote from it. But these upheavals ceased at last, and the globe assumed the shape that we see. Moses hints at these changes in few words: the separation of light from darkness indicates the melting caused by the fire; and the separation of the moist from the dry marks the effects of inundations. But who does not see that these disorders have served to bring things to the point where they now are, that we owe to them our riches and our comforts, and that through their agency this globe became fit for cultivation by us. These disorders passed into order. The disorders, real or apparent, that we see from afar are sunspots and comets; but we do not know what uses they supply, nor the rules prevailing therein. Time was when the planets were held to be wandering stars: now their motion is found to be regular. Peradventure it is the same with the comets: posterity will know.

246. One does not include among the disorders inequality of conditions, and M. Jacquelot is justified in asking those who would have everything

equally perfect, why rocks are not crowned with leaves and flowers? why ants are not peacocks? And if there must needs be equality everywhere, the poor man would serve notice of appeal against the rich, the servant against the master. The pipes of an organ must not be of equal size. M. Bayle will say that there is a difference between a privation of good and a disorder; between a disorder in inanimate things, which is purely metaphysical, and a disorder in rational creatures, which is composed of crime and sufferings. He is right in making a distinction between them, and I am right in combining them. God does not neglect inanimate things: they do not feel, but God feels for them. He does not neglect animals: they have not intelligence, but God has it for them. He would reproach himself for the slightest actual defect there were in the universe, even though it were perceived of none.

247. It seems M. Bayle does not approve any comparison between the disorders which may exist in inanimate things and those which trouble the peace and happiness of rational creatures; nor would he agree to our justifying the permission of vice on the pretext of the care that must be taken to avoid disturbing the laws of motion. One might thence conclude, according to him (posthumous Reply to M. Jacquelot,), ‘that God created the world only to display his infinite skill in architecture and mechanics, whilst his property of goodness and love of virtue took no part in the construction of this great work. This God would pride himself only on skill; he would prefer to let the whole human kind perish rather than suffer some atoms to go faster or more slowly than general laws require.’ M. Bayle would not have made this antithesis if he had been informed on the system of general harmony which I assume, which states that the realm of efficient causes and that of final causes are parallel to each other; that God has no less the quality of the best monarch than that of the greatest architect; that matter is so disposed that the laws of motion serve as the best guidance for

spirits; and that consequently it will prove that he has attained the utmost good possible, provided one reckon the metaphysical, physical and moral goods together.

248. But (M. Bayle will say) God having power to avert innumerable evils by one small miracle, why did he not employ it? He gives so much extraordinary help to fallen men; but slight help of such a kind given to Eve would have prevented her fall and rendered the temptation of the serpent ineffective. I have sufficiently met objections of this sort with this general answer, that God ought not to make choice of another universe since he has chosen the best, and has only made use of the miracles necessary thereto. I had answered M. Bayle that miracles change the natural order of the universe. He replies, that that is an illusion, and that the miracle of the wedding at Cana (for instance) made no change in the air of the room, except that instead of receiving into its pores some corpuscles of water, it received corpuscles of wine. But one must bear in mind that once the best plan of things has been chosen nothing can be changed therein.

249. As for miracles (concerning which I have already said something in this work), they are perhaps not all of one and the same kind: there are many, to all appearances, which God brings about through the ministry of invisible substances, such as the angels, as Father Malebranche also believes. These angels or these substances act according to the ordinary laws of their nature, being combined with bodies more rarefied and more vigorous than those we have at our command. And such miracles are only so by comparison, and in relation to us; just as our works would be considered miraculous amongst animals if they were capable of remarking upon them. The changing of water into wine might be a miracle of this kind. But the Creation, the Incarnation and some other actions of God exceed all the power of creatures and are truly miracles, or indeed Mysteries. If, nevertheless, the changing of water into wine at Cana was a miracle of the

highest kind, God would have thereby changed the whole course of the universe, because of the connexion of bodies; or else he would have been bound to prevent this connexion miraculously also, and cause the bodies not concerned in the miracle to act as if no miracle had happened. After the miracle was over, it would have been necessary to restore all things in those very bodies concerned to the state they would have reached without the miracle: whereafter all would have returned to its original course. Thus this miracle demanded more than at first appears.

250. As for physical evil in creatures, to wit their sufferings, M. Bayle contends vigorously against those who endeavour to justify by means of particular reasons the course of action pursued by God in regard to this. Here I set aside the sufferings of animals, and I see that M. Bayle insists chiefly on those of men, perhaps because he thinks that brute beasts have no feeling. It is on account of the injustice there would be in the sufferings of beasts that divers Cartesians wished to prove that they are only machines, *quoniam sub Deo justo nemo innocens miser est*: it is impossible that an innocent creature should be unhappy under such a master as God. The principle is good, but I do not think it warrants the inference that beasts have no feeling, because I think that, properly speaking, perception is not sufficient to cause misery if it is not accompanied by reflexion. It is the same with happiness: without reflexion there is none.

O fortunatos nimium, sua qui bona norint!

One cannot reasonably doubt the existence of pain among animals; but it seems as if their pleasures and their pains are not so keen as they are in man: for animals, since they do not reflect, are susceptible neither to the grief that accompanies pain, nor to the joy that accompanies pleasure. Men are sometimes in a state approaching that of the beasts, when they act almost on instinct alone and simply on the impressions made by the

experience of the senses: and, in this state, their pleasures and their pains are very slight.

251. But let us pass from the beasts and return to rational creatures. It is with regard to them that M. Bayle discusses this question: whether there is more physical evil than physical good in the world? (*Reply to the Questions of a Provincial*, vol. II, ch. 75.) To settle it aright, one must explain wherein these goods and evils lie. We are agreed that physical evil is simply displeasure and under that heading I include pain, grief, and every other kind of discomfort. But does physical good lie solely in pleasure? M. Bayle appears to be of this opinion; but I consider that it lies also in a middle state, such as that of health. One is well enough when one has no ill; it is a degree of wisdom to have no folly:

Sapientia prima est,

Stultitia caruisse.

In the same way one is worthy of praise when one cannot with justice be blamed:

Si non culpabor, sat mihi laudis erit.

That being the case, all the sensations not unpleasing to us, all the exercises of our powers that do not incommode us, and whose prevention would incommode us, are physical goods, even when they cause us no pleasure; for privation of them is a physical evil. Besides we only perceive the good of health, and other like goods, when we are deprived of them. On those terms I would dare to maintain that even in this life goods exceed evils, that our comforts exceed our discomforts, and that M. Descartes was justified in writing (vol. I, Letter 9) ‘that natural reason teaches us that we have more goods than evils in this life’.

252. It must be added that pleasures enjoyed too often and to excess would be a very great evil. There are some which Hippocrates compared to

the falling sickness, and Scioppius doubtless only made pretence of envying the sparrows in order to be agreeably playful in a learned and far from playful work. Highly seasoned foods are injurious to health and impair the niceness of a delicate sense; and in general bodily pleasures are a kind of expenditure of the spirit, though they be made good in some better than in others.

253. As proof, however, that the evil exceeds the good is quoted the instance of M. de la Motte le Vayer (Letter 134), who would not have been willing to return to the world, supposing he had had to play the same part as providence had already assigned to him. But I have already said that I think one would accept the proposal of him who could re-knot the thread of Fate if a new part were promised to us, even though it should not be better than the first. Thus from M. de la Motte le Vayer's saying it does not follow that he would not have wished for the part he had already played, provided it had been new, as M. Bayle seems to take it.

254. The pleasures of the mind are the purest, and of greatest service in making joy endure. Cardan, when already an old man, was so content with his state that he protested solemnly that he would not exchange it for the state of the richest of young men who at the same time was ignorant. M. de la Motte le Vayer quotes the saying himself without criticizing it. Knowledge has doubtless charms which cannot be conceived by those who have not tasted them. I do not mean a mere knowledge of facts without that of reasons, but knowledge like that of Cardan, who with all his faults was a great man, and would have been incomparable without those faults.

Felix, qui potuit rerum cognoscere causas!
Ille metus omnes et inexorabile fatum
Subjecit pedibus.

It is no small thing to be content with God and with the universe, not to fear what destiny has in store for us, nor to complain of what befalls us.

Acquaintance with true principles gives us this advantage, quite other than that the Stoics and the Epicureans derived from their philosophy. There is as much difference between true morality and theirs as there is between joy and patience: for their tranquillity was founded only on necessity, while ours must rest upon the perfection and beauty of things, upon our own happiness.

255. What, then, shall we say of bodily sufferings? May they not be sufficiently acute to disturb the sage's tranquillity? Aristotle assents; the Stoics were of a different opinion, and even the Epicureans likewise. M. Descartes revived the doctrine of these philosophers; he says in the letter just quoted: 'that even amid the worst misfortunes and the most overwhelming sufferings one may always be content, if only one knows how to exercise reason'. M. Bayle says concerning this (*Reply to the Questions of a Provincial*, vol. III, ch. 157,) 'that it is saying nothing, that it is prescribing for us a remedy whose preparation hardly anyone understands'. I hold that the thing is not impossible, and that men could attain it by dint of meditation and practice. For apart from the true martyrs and those who have been aided in wonderful wise from on high, there have been counterfeits who imitated them. That Spanish slave who killed the Carthaginian governor in order to avenge his master and who evinced great joy in his deed, even in the greatest tortures, may shame the philosophers. Why should not one go as far as he? One may say of an advantage, as of a disadvantage:

Cuivis potest accidere, quod cuiquam potest.

256. But even to-day entire tribes, such as the Hurons, the Iroquois, the Galibis and other peoples of America teach us a great lesson on this matter: one cannot read without astonishment of the intrepidity and well-nigh insensibility wherewith they brave their enemies, who roast them over a slow fire and eat them by slices. If such people could retain their physical

superiority and their courage, and combine them with our acquirements, they would surpass us in every way,

Extat ut in mediis turris aprica casis.

They would be, in comparison with us, as a giant to a dwarf, a mountain to a hill:

Quantus Eryx, et quantus Athos, gaudetque nivali
Vertice se attollens pater Apenninus ad auras.

257. All that which is effected by a wonderful vigour of body and mind in these savages, who persist obstinately in the strangest point of honour, might be acquired in our case by training, by well-seasoned mortifications, by an overmastering joy founded on reason, by great practice in preserving a certain presence of mind in the midst of the distractions and impressions most liable to disturb it. Something of this kind is related of the ancient Assassins, subjects and pupils of the Old Man or rather the Seigneur (*Senior*) of the Mountain. Such a school (for a better purpose) would be good for missionaries who would wish to return to Japan. The Gymnosophists of the ancient Indians had perhaps something resembling this, and that Calanus, who provided for Alexander the Great the spectacle of his burning alive, had doubtless been encouraged by the great examples of his masters and trained by great sufferings not to fear pain. The wives of these same Indians, who even to-day ask to be burned with the bodies of their husbands, seem still to keep something of the courage of those ancient philosophers of their country. I do not expect that there should straightway be founded a religious order whose purpose would be to exalt man to that high pitch of perfection: such people would be too much above the rest, and too formidable for the authorities. As it rarely happens that people are exposed to extremes where such great strength of mind would be needed,

one will scarce think of providing for it at the expense of our usual comforts, albeit incomparably more would be gained than lost thereby.

258. Nevertheless the very fact that one has no need of that great remedy is a proof that the good already exceeds the evil. Euripides also said:

πλειω τα χρηστα των κακων ειναι βροτοις.

Mala nostra longe judico vinci a bonis.

Homer and divers other poets were of another mind, and men in general agree with them. The reason for this is that the evil arouses our attention rather than the good: but this same reason proves that the evil is more rare. One must therefore not credit the petulant expressions of Pliny, who would have it that Nature is a stepmother, and who maintains that man is the most unhappy and most vain of all creatures. These two epithets do not agree: one is not so very unhappy, when one is full of oneself. It is true that men hold human nature only too much in contempt, apparently because they see no other creatures capable of arousing their emulation; but they have all too much self-esteem, and individually are but too easily satisfied. I therefore agree with Meric Casaubon, who in his notes on the Xenophanes of Diogenes Laertius praises exceedingly the admirable sentiments of Euripides, going so far as to credit him with having said things *quae spirant* θεοπνευστον *pectus*. Seneca (Lib. 4, c. 5, *De Benefic.*) speaks eloquently of the blessings Nature has heaped upon us. M. Bayle in his *Dictionary*, article 'Xenophanes', brings up sundry authorities against this, and among others that of the poet Diphilus in the Collections of Stobaeus, whose Greek might be thus expressed in Latin:

Fortuna cyathis bibere nos datis jubens,

Infundit uno terna pro bono mala.

259. M. Bayle believes that if it were a question only of the evil of guilt, or of moral evil among men, the case would soon be terminated to the advantage of Pliny, and Euripides would lose his action. To that I am not

opposed; our vices doubtless exceed our virtues, and this is the effect of original sin. It is nevertheless true that also on that point men in general exaggerate things, and that even some theologians disparage man so much that they wrong the providence of the Author of mankind. That is why I am not in favour of those who thought to do great honour to our religion by saying that the virtues of the pagans were only *splendida peccata*, splendid vices. It is a sally of St. Augustine's which has no foundation in holy Scripture, and which offends reason. But here we are only discussing a physical good and evil, and one must compare in detail the prosperities and the adversities of this life. M. Bayle would wish almost to set aside the consideration of health; he likens it to the rarefied bodies, which are scarcely felt, like air, for example; but he likens pain to the bodies that have much density and much weight in slight volume. But pain itself makes us aware of the importance of health when we are bereft of it. I have already observed that excess of physical pleasures would be a real evil, and the matter ought not to be otherwise; it is too important for the spirit to be free. Lactantius (*Divin. Instit.* lib. 3, ca) had said that men are so squeamish that they complain of the slightest ill, as if it swallowed up all the goods they have enjoyed. M. Bayle says, concerning this, that the very fact that men have this feeling warrants the judgement that they are in evil case, since it is feeling which measures the extent of good or evil. But I answer that present feeling is anything rather than the true measure of good and evil past and future. I grant that one is in evil case while one makes these peevish reflexions; but that does not exclude a previous state of well-being, nor imply that, everything reckoned in and all allowance made, the good does not exceed the evil.

260. I do not wonder that the pagans, dissatisfied with their gods, made complaints against Prometheus and Epimetheus for having forged so weak an animal as man. Nor do I wonder that they acclaimed the fable of old

Silenus, foster-father of Bacchus, who was seized by King Midas, and as the price of his deliverance taught him that ostensibly fine maxim that the first and the greatest of goods was not to be born, and the second, to depart from this life with dispatch (Cic. *Tuscul.* lib. 1). Plato believed that souls had been in a happier state, and many of the ancients, amongst others Cicero in his Consolation (according to the account of Lactantius), believed that for their sins they were confined in bodies as in a prison. They rendered thus a reason for our ills, and asserted their prejudices against human life: for there is no such thing as a beautiful prison. But quite apart from the consideration that, even according to these same pagans, the evils of this life would be counterbalanced and exceeded by the goods of past and future lives, I make bold to say that we shall find, upon unbiassed scrutiny of the facts, that taking all in all human life is in general tolerable. And adding thereto the motives of religion, we shall be content with the order God has set therein. Moreover, for a better judgement of our goods and our evils, it will be well to read Cardan, *De Utilitate ex Adversis Capienda*, and Novarini, *De Occultis Dei Beneficiis*.

261. M. Bayle dilates upon the misfortunes of the great, who are thought to be the most fortunate: the constant experience of the fair aspect of their condition renders them unaware of good, but greatly aware of evil. Someone will say: so much the worse for them; if they know not how to enjoy the advantages of nature and fortune, is that the fault of either? There are nevertheless great men possessed of more wisdom, who know how to profit by the favours God has shown them, who are easily consoled for their misfortunes, and who even turn their own faults to account. M. Bayle pays no heed to that: he prefers to listen to Pliny, who thinks that Augustus, one of the princes most favoured by fortune, experienced at least as much evil as good. I admit that he found great causes of trouble in his family and that remorse for having crushed the Republic may have tormented him; but I

think that he was too wise to grieve over the former, and that Maecenas apparently made him understand that Rome had need of a master. Had not Augustus been converted on this point, Vergil would never have said of a lost soul:

Vendidit hic auro patriam Dominumque potentem
Imposuit, fixit leges pretio atque refixit.

Augustus would have thought that he and Caesar were alluded to in these lines, which speak of a master given to a free state. But there is every indication that he applied it just as little to his dominion, which he regarded as compatible with liberty and as a necessary remedy for public evils, as the princes of to-day apply to themselves the words used of the kings censured in M. de Cambray's *Telemachus*. Each one considers himself within his rights. Tacitus, an unbiassed writer, justifies Augustus in two words, at the beginning of his *Annals*. But Augustus was better able than anyone to judge of his good fortune. He appears to have died content, as may be inferred from a proof he gave of contentedness with his life: for in dying he repeated to his friends a line in Greek, which has the signification of that *Plaudite* that was wont to be spoken at the conclusion of a well-acted play. Suetonius quotes it:

Δοτε κροτον και παντες ῾υμεις μετα χαρας κτυπησατε.

262. But even though there should have fallen to the lot of the human kind more evil than good, it is enough where God is concerned that there is incomparably more good than evil in the universe. Rabbi Maimonides (whose merit is not sufficiently recognized in the statement that he is the first of the Rabbis to have ceased talking nonsense) also gave wise judgement on this question of the predominance of good over evil in the world. Here is what he says in his *Doctor Perplexorum* (ca,): 'There arise often in the hearts of ill-instructed persons thoughts which persuade them there is more evil than good in the world: and one often finds in the poems

and songs of the pagans that it is as it were a miracle when something good comes to pass, whereas evils are usual and constant. This error has taken hold not of the common herd only, those very persons who wish to be considered wise have been beguiled thereby. A celebrated writer named Alrasi, in his *Sepher Elohuth*, or Theosophy, amongst other absurdities has stated that there are more evils than goods, and that upon comparison of the recreations and the pleasures man enjoys in times of tranquillity with the pains, the torments, the troubles, faults, cares, griefs and afflictions whereby he is overwhelmed our life would prove to be a great evil, and an actual penalty inflicted upon us to punish us.' Maimonides adds that the cause of their extravagant error is their supposition that Nature was made for them only, and that they hold of no account what is separate from their person; whence they infer that when something unpleasing to them occurs all goes ill in the universe.

263. M. Bayle says that this observation of Maimonides is not to the point, because the question is whether among men evil exceeds good. But, upon consideration of the Rabbi's words, I find that the question he formulates is general, and that he wished to refute those who decide it on one particular motive derived from the evils of the human race, as if all had been made for man; and it seems as though the author whom he refutes spoke also of good and evil in general. Maimonides is right in saying that if one took into account the littleness of man in relation to the universe one would comprehend clearly that the predominance of evil, even though it prevailed among men, need not on that account occur among the angels, nor among the heavenly bodies, nor among the elements and inanimate compounds, nor among many kinds of animals. I have shown elsewhere that in supposing that the number of the damned exceeds that of the saved (a supposition which is nevertheless not altogether certain) one might admit that there is more evil than good in respect of the human kind known to us.

But I pointed out that that neither precludes the existence of incomparably more good than evil, both moral and physical, in rational creatures in general, nor prevents the city of God, which contains all creatures, from being the most perfect state. So also on consideration of the metaphysical good and evil which is in all substances, whether endowed with or devoid of intelligence, and which taken in such scope would include physical good and moral good, one must say that the universe, such as it actually is, must be the best of all systems.

264. Moreover, M. Bayle will not have it that our transgression should have anything to do with the consideration of our sufferings. He is right when it is simply a matter of appraising these sufferings; but the case is not the same when one asks whether they should be ascribed to God, this indeed being the principal cause of M. Bayle's difficulties when he places reason or experience in opposition to religion. I know that he is wont to say that it is of no avail to resort to our free will, since his objections tend also to prove that the misuse of free will must no less be laid to the account of God, who has permitted it and who has co-operated therein. He states it as a maxim that for one difficulty more or less one must not abandon a system. This he advances especially in favour of the methods of the strict and the dogma of the Supralapsarians. For he supposes that one can subscribe to their opinion, although he leaves all the difficulties in their entirety, because the other systems, albeit they put an end to some of the difficulties, cannot meet them all. I hold that the true system I have expounded satisfies all. Nevertheless, even were that not so, I confess that I cannot relish this maxim of M. Bayle's, and I should prefer a system which would remove a great portion of the difficulties, to one which would meet none of them. And the consideration of the wickedness of men, which brings upon them well-nigh all their misfortunes, shows at least that they have no right to

complain. No justice need trouble itself over the origin of a scoundrel's wickedness when it is only a question of punishing him: it is quite another matter when it is a question of prevention. One knows well that disposition, upbringing, conversation, and often chance itself, have much share in that origin: is the man any the less deserving of punishment?

265. I confess that there still remains another difficulty. If God is not bound to account to the wicked for their wickedness, it seems as if he owes to himself, and to those who honour him and love him, justification for his course of action with regard to the permission of vice and crime. But God has already given that satisfaction, as far as it is needed here on earth: by granting us the light of reason he has bestowed upon us the means whereby we may meet all difficulties. I hope that I have made it plain in this discourse, and have elucidated the matter in the preceding portion of these Essays, almost as far as it can be done through general arguments. Thereafter, the permission of sin being justified, the other evils that are a consequence thereof present no further difficulty. Thus also I am justified in restricting myself here to the evil of guilt to account for the evil of punishment, as Holy Scripture does, and likewise well-nigh all the Fathers of the Church and the Preachers. And, to the end that none may say that is only good *per la predica*, it is enough to consider that, after the solutions I have given, nothing must seem more right or more exact than this method. For God, having found already among things possible, before his actual decrees, man misusing his freedom and bringing upon himself his misfortune, yet could not avoid admitting him into existence, because the general plan required this. Wherefore it will no longer be necessary to say with M. Jurieu that one must dogmatize like St. Augustine and preach like Pelagius.

266. This method, deriving the evil of punishment from the evil of guilt, cannot be open to censure, and serves especially to account for the greatest

physical evil, which is damnation. Ernst Sonner, sometime Professor of Philosophy at Altorf (a university established in the territory of the free city of Nuremberg), who was considered an excellent Aristotelian, but was finally recognized as being secretly a Socinian, had composed a little discourse entitled: *Demonstration against the Eternity of Punishment*. It was founded on this somewhat trite principle, that there is no proportion between an infinite punishment and a finite guilt. It was conveyed to me, printed (so it seemed) in Holland; and I replied that there was one thing to be considered which had escaped the late Herr Sonner: namely that it was enough to say that the duration of the guilt caused the duration of the penalty. Since the damned remained wicked they could not be withdrawn from their misery; and thus one need not, in order to justify the continuation of their sufferings, assume that sin has become of infinite weight through the infinite nature of the object offended, who is God. This thesis I had not explored enough to pass judgement thereon. I know that the general opinion of the Schoolmen, according to the Master of the Sentences, is that in the other life there is neither merit nor demerit; but I do not think that, taken literally, it can pass for an article of faith. Herr Fecht, a famous theologian at Rostock, well refuted that in his book on *The State of the Damned*. It is quite wrong, he says (§ 59); God cannot change his nature; justice is essential to him; death has closed the door of grace, but not that of justice.

267. I have observed that sundry able theologians have accounted for the duration of the pains of the damned as I have just done. Johann Gerhard, a famous theologian of the Augsburg Confession (in *Locis Theol.* loco de Inferno, § 60), brings forward amongst other arguments that the damned have still an evil will and lack the grace that could render it good. Zacharias Ursinus, a theologian of Heidelberg, who follows Calvin, having formulated this question (in his treatise *De Fide*) why sin merits an eternal punishment,

advances first the common reason, that the person offended is infinite, and then also this second reason, *quod non cessante peccato non potest cessare poena*. And the Jesuit Father Drexler says in his book entitled *Nicetas, or Incontinence Overcome* (book 2, ch. 11, § 9): 'Nec mirum damnatos semper torqueri, continue blasphemant, et sic quasi semper peccant, semper ergo plectuntur.' He declares and approves the same reason in his work on *Eternity* (book 2, ch. 15) saying: 'Sunt qui dicant, nec displicet responsum: scelerati in locis infernis semper peccant, ideo semper puniuntur.' And he indicates thereby that this opinion is very common among learned men in the Roman Church. He alleges, it is true, another more subtle reason, derived from Pope Gregory the Great (lib. 4, Dial. c. 44), that the damned are punished eternally because God foresaw by a kind of *mediate knowledge* that they would always have sinned if they had always lived upon earth. But it is a hypothesis very much open to question. Herr Fecht quotes also various eminent Protestant theologians for Herr Gerhard's opinion, although he mentions also some who think differently.

268. M. Bayle himself in various places has supplied me with passages from two able theologians of his party, which have some reference to these statements of mine. M. Jurieu in his book on the *Unity of the Church*, in opposition to that written by M. Nicole on the same subject, gives the opinion () 'that reason tells us that a creature which cannot cease to be criminal can also not cease to be miserable'. M. Jacquelot in his book on *The Conformity of Faith with Reason* () is of opinion 'that the damned must remain eternally deprived of the glory of the blessed, and that this deprivation might well be the origin and the cause of all their pains, through the reflexions these unhappy creatures make upon their crimes which have deprived them of an eternal bliss. One knows what burning regrets, what pain envy causes to those who see themselves deprived of a good, of a notable honour which had been offered to them, and which they rejected,

especially when they see others invested with it.' This position is a little different from that of M. Jurieu, but both agree in this sentiment, that the damned are themselves the cause of the continuation of their torments. M. le Clerc's Origenist does not entirely differ from this opinion when he says in the *Select Library* (vol. 7,): 'God, who foresaw that man would fall, does not condemn him on that account, but only because, although he has the power to recover himself, he yet does not do so, that is, he freely retains his evil ways to the end of his life.' If he carries this reasoning on beyond this life, he will ascribe the continuation of the pains of the wicked to the continuation of their guilt.

269. M. Bayle says (*Reply to the Questions of a Provincial*, ch. 175,) 'that this dogma of the Origenist is heretical, in that it teaches that damnation is not founded simply on sin, but on voluntary impenitence': but is not this voluntary impenitence a continuation of sin? I would not simply say, however, that it is because man, having the power to recover himself, does not; and would wish to add that it is because man does not take advantage of the succour of grace to aid him to recover himself. But after this life, though one assume that the succour ceases, there is always in the man who sins, even when he is damned, a freedom which renders him culpable, and a power, albeit remote, of recovering himself, even though it should never pass into action. And there is no reason why one may not say that this degree of freedom, exempt from necessity, but not exempt from certainty, remains in the damned as well as in the blessed. Moreover, the damned have no need of a succour that is needed in this life, for they know only too well what one must believe here.

270. The illustrious prelate of the Anglican Church who published recently a book on the origin of evil, concerning which M. Bayle made some observations in the second volume of his *Reply*, speaks with much subtlety about the pains of the damned. This prelate's opinion is presented

(according to the author of the *Nouvelles de la République des Lettres*, June 1703) as if he made 'of the damned just so many madmen who will feel their miseries acutely, but who will nevertheless congratulate themselves on their own behaviour, and who will rather choose to be, and to be that which they are, than not to be at all. They will love their state, unhappy as it will be, even as angry people, lovers, the ambitious, the envious take pleasure in the very things that only augment their misery. Furthermore the ungodly will have so accustomed their mind to wrong judgements that they will henceforth never make any other kind, and will perpetually pass from one error into another. They will not be able to refrain from desiring perpetually things whose enjoyment will be denied them, and, being deprived of which, they will fall into inconceivable despair, while experience can never make them wiser for the future. For by their own fault they will have altogether corrupted their understanding, and will have rendered it incapable of passing a sound judgement on any matter.'

271. The ancients already imagined that the Devil dwells remote from God voluntarily, in the midst of his torments, and that he is unwilling to redeem himself by an act of submission. They invented a tale that an anchorite in a vision received a promise from God that he would receive into grace the Prince of the bad angels if he would acknowledge his fault; but that the devil rebuffed this mediator in a strange manner. At the least, the theologians usually agree that the devils and the damned hate God and blaspheme him; and such a state cannot but be followed by continuation of misery. Concerning that, one may read the learned treatise of Herr Fecht on the *State of the Damned*.

272. There were times when the belief was held that it was not impossible for a lost soul to be delivered. The story told of Pope Gregory the Great is well known, how by his prayers he had withdrawn from hell the soul of the Emperor Trajan, whose goodness was so renowned that to new

emperors the wish was offered that they should surpass Augustus in good fortune and Trajan in goodness. It was this that won for the latter the pity of the Holy Father. God acceded to his prayers (it is said), but he forbade him to make the like prayers in future. According to this fable, the prayers of St. Gregory had the force of the remedies of Aesculapius, who recalled Hippolytus from Hades; and, if he had continued to make such prayers, God would have waxed wroth, like Jupiter in Vergil:

At pater omnipotens aliquem indignatus ab umbris
Mortalem infernis ad lumina surgere vitae,
Ipse repertorem medicinae talis et artis
Fulmine Phoebigenam Stygias detrusit ad undas.

Godescalc, a monk of the ninth century, who set at variance the theologians of his day, and even those of our day, maintained that the reprobate should pray God to render their pains more bearable; but one is never justified in believing oneself reprobate so long as one is alive. The passage in the Mass for the dead is more reasonable: it asks for the abatement of the torments of the damned, and, according to the hypothesis that I have just stated, one must wish for them *meliorem mentem*. Origen having applied the passage from Psalm lxxvii, verse 10: God will not forget to be gracious, neither will he shut up his loving-kindness in displeasure, St. Augustine replies *(Enchirid.* c. 112) that it is possible that the pains of the damned last eternally, and that they may nevertheless be mitigated. If the text implied that, the abatement would, as regards its duration, go on to infinity; and yet that abatement would, as regards its extent, have a *non plus ultra*. Even so there are asymptote figures in geometry where an infinite length makes only a finite progress in breadth. If the parable of the wicked rich man represented the state of a definitely lost soul, the hypothesis which makes these souls so mad and so wicked would be groundless. But the

charity towards his brothers attributed to him in the parable does not seem to be consistent with that degree of wickedness which is ascribed to the damned. St. Gregory the Great (IX *Mor.* 39) thinks that the rich man was afraid lest their damnation should increase his: but it seems as though this fear is not sufficiently consistent with the disposition of a perfectly wicked will. Bonaventura, on the Master of the Sentences, says that the wicked rich man would have desired to see everyone damned; but since that was not to be, he desired the salvation of his brothers rather than that of the rest. This reply is by no means sound. On the contrary, the mission of Lazarus that he desired would have served to save many people; and he who takes so much pleasure in the damnation of others that he desires it for everyone will perhaps desire that damnation for some more than others; but, generally speaking, he will have no inclination to gain salvation for anyone. However that may be, one must admit that all this detail is problematical, God having revealed to us all that is needed to put us in fear of the greatest of misfortunes, and not what is needed for our understanding thereof.

273. Now since it is henceforth permitted to have recourse to the misuse of free will, and to evil will, in order to account for other evils, since the divine permission of this misuse is plainly enough justified, the ordinary system of the theologians meets with justification at the same time. Now we can seek with confidence *the origin of evil in the freedom of creatures*. The first wickedness is well known to us, it is that of the Devil and his angels: the Devil sinneth from the beginning, and for this purpose the Son of God was manifested, that he might destroy the works of the Devil (1 John iii. 8). The Devil is the father of wickedness, he was a murderer from the beginning, and abode not in the truth (John viii. 44). And therefore God spared not the angels that sinned, but cast them down to Hell, and delivered them into chains of darkness, to be reserved unto judgement (2 Pet. ii. 4). And the angels which kept not their own habitation, he hath reserved in

eternal (that is to say everlasting) chains under darkness unto the judgement of the great day (Jude i. 6). Whence it is easy to observe that one of these two letters must have been seen by the author of the other.

274. It seems as if the author of the Apocalypse wished to throw light upon what the other canonical writers had left obscure: he gives us an account of a battle that took place in Heaven. Michael and his angels fought against the Dragon, and the Dragon fought and his angels. 'But they prevailed not, neither was their place found any more in heaven. And the great Dragon was cast out, that old serpent, called the Devil, and Satan, which deceiveth the whole world: and he was cast out into the earth, and his angels were cast out with him' (Rev. xii. 7, 8, 9). For although this account is placed after the flight of the woman into the wilderness, and it may have been intended to indicate thereby some revulsion favourable to the Church, it appears as though the author's design was to show simultaneously the old fall of the first enemy and a new fall of a new enemy.

275. Lying or wickedness springs from the Devil's own nature, εκ των ιδιων from his will, because it was written in the book of the eternal verities, which contains the things possible before any decree of God, that this creature would freely turn toward evil if it were created. It is the same with Eve and Adam; they sinned freely, albeit the Devil tempted them. God gives the wicked over to a reprobate mind (Rom. i. 28), abandoning them to themselves and denying them a grace which he owes them not, and indeed ought to deny to them.

276. It is said in the Scriptures that God hardeneth (Exod. iv. 21 and vii. 3; Isa. lxiii. 17); that God sendeth a lying spirit (1 Kings xxii. 23); strong delusion that they should believe a lie (2 Thess. ii. 11); that he deceived the prophet (Ezek. xiv. 9); that he commanded Shimei to curse (2 Sam xvi. 10); that the children of Eli hearkened not unto the voice of their father, because the Lord would slay them (1 Sam. ii. 25); that the Lord took away Job's

substance, even although that was done through the malice of brigands (Job i. 21); that he raised up Pharaoh, to show his power in him (Exod. ix. 19; Rom. ix. 17) that he is like a potter who maketh a vessel unto dishonour (Rom. ix. 21); that he hideth the truth from the wise and prudent (Matt. xi. 25); that he speaketh in parables unto them that are without, that seeing they may see and not perceive, and hearing they may hear and not understand, lest at any time they might be converted, and their sins might be forgiven them (Mark iv. 12; Luke viii. 10); that Jesus was delivered by the determinate counsel and foreknowledge of God (Acts ii. 23); that Pontius Pilate and Herod with the Gentiles and the people of Israel did that which the hand and the counsel of God had determined before to be done (Acts iv. 27, 28); that it was of the Lord to harden the hearts of the enemy, that they should come against Israel in battle, that he might destroy them utterly, and that they might have no favour (Joshua xi. 20); that the Lord mingled a perverse spirit in the midst of Egypt, and caused it to err in all its works, like a drunken man (Isa. xix. 14); that Rehoboam hearkened not unto the word of the people, for the cause was from the Lord (1 Kings xii. 15); that he turned the hearts of the Egyptians to hate his people (Ps. cv. 25). But all these and other like expressions suggest only that the things God has done are used as occasion for ignorance, error, malice and evil deeds, and contribute thereto, God indeed foreseeing this, and intending to use it for his ends, since superior reasons of perfect wisdom have determined him to permit these evils, and even to co-operate therein. ‘Sed non sineret bonus fieri male, nisi omnipotens etiam de malo posset facere bene’, in St. Augustine’s words. But this has been expounded more fully in the preceding part.

277. God made man in his image (Gen. i. 26); he made him upright (Eccles. vii. 29). But also he made him free. Man has behaved badly, he has fallen; but there remains still a certain freedom after the fall. Moses said as

from God: ‘I call heaven and earth to record this day against you, that I have set before you life and death, blessing and cursing; therefore choose life’ (Deut. xxx. 19). ‘Thus saith the Lord: Behold, I set before you the way of life, and the way of death’ (Jer. xxi. 8). He has left man in the power of his counsel, giving him his ordinances and his commandments. ‘If thou wilt, thou shalt keep the commandments’ (or they shall keep thee). ‘He hath set before thee fire and water, to stretch forth thine hand to whichever thou wilt’ (Sirach xv. 14, 15, 16). Fallen and unregenerate man is under the domination of sin and of Satan, because it pleases him so to be; he is a voluntary slave through his evil lust. Thus it is that free will and will in bondage are one and the same thing.

278. ‘Let no man say, I am tempted of God’; ‘but every man is tempted, when he is drawn away of his own lust and enticed’ (Jas. i. 13, 14). And Satan contributes thereto. He ‘blindeth the minds of them which believe not’ (2 Cor. iv. 4). But man is delivered up to the Devil by his covetous desire: the pleasure he finds in evil is the bait that hooks him. Plato has said so already, and Cicero repeats it: ‘Plato voluptatem dicebat escam malorum.’ Grace sets over against it a greater pleasure, as St. Augustine observed. All *pleasure* is a feeling of some perfection; one *loves* an object in proportion as one feels its perfections; nothing surpasses the divine perfections. Whence it follows that charity and love of God give the greatest pleasure that can be conceived, in that proportion in which one is penetrated by these feelings, which are not common among men, busied and taken up as men are with the objects that are concerned with their passions.

279. Now as our corruption is not altogether invincible and as we do not necessarily sin even when we are under the bondage of sin, it must likewise be said that we are not aided invincibly; and, however efficacious divine grace may be, there is justification for saying that one can resist it. But

when it indeed proves victorious, it is certain and infallible beforehand that one will yield to its allurements, whether it have its strength of itself or whether it find a way to triumph through the congruity of circumstances. Thus one must always distinguish between the infallible and the necessary.

280. The system of those who call themselves Disciples of St. Augustine is not far removed from this, provided one exclude certain obnoxious things, whether in the expressions or in the dogmas themselves. In the *expressions* I find that it is principally the use of terms like 'necessary' or 'contingent', 'possible' or 'impossible', which sometimes gives a handle and causes much ado. That is why, as Herr Löscher the younger aptly observed in a learned dissertation on the *Paroxysms of the Absolute Decree*, Luther desired, in his book *On the Will in Bondage*, to find a word more fitting for that which he wished to express than the word necessity. Speaking generally, it appears more reasonable and more fitting to say that obedience to God's precepts is always *possible*, even for the unregenerate; that the grace of God is always *resistible*, even in those most holy, and that *freedom* is exempt not only from *constraint* but also from *necessity*, although it be never without infallible *certainty* or without inclining *determination*.

281. Nevertheless there is on the other hand a sense wherein it would be permitted to say, in certain conjunctures, that the *power* to do good is often lacking, even in the just; that sins are often *necessary*, even in the regenerate; that it is *impossible* sometimes for one not to sin; that grace is *irresistible*; that freedom is not exempt from *necessity*. But these expressions are less exact and less pleasing in the circumstances that prevail about us to-day. They are also in general more open to misuse; and moreover they savour somewhat of the speech of the people, where terms are employed with great latitude. There are, however, circumstances which render them acceptable and even serviceable. It is the case that sacred and

orthodox writers, and even the holy Scriptures, have made use of expressions on both sides, and no real contradiction has arisen, any more than between St. Paul and St. James, or any error on either side that might be attributable to the ambiguity of the terms. One is so well accustomed to these various ways of speaking that often one is put to it to say precisely which sense is the more ordinary and the more natural, and even that more intended by the author (*quis sensus magis naturalis, obvius, intentus*). For the same writer has different aims in different passages, and the same ways of speaking are more or less accepted or acceptable before or after the decision of some great man or of some authority that one respects and follows. As a result of this one may well authorize or ban, as opportunity arises and at certain times, certain expressions; but it makes no difference to the sense, or to the content of faith, if sufficient explanations of the terms are not added.

282. It is therefore only necessary to understand fully some distinctions, such as that I have very often urged between the necessary and the certain, and between metaphysical necessity and moral necessity. It is the same with possibility and impossibility, since the event whose opposite is possible is contingent, even as that whose opposite is impossible is necessary. A distinction is rightly drawn also between a proximate potency and a remote potency; and, according to these different senses, one says now that a thing may be and now that it may not be. It may be said in a certain sense that it is necessary that the blessed should not sin; that the devils and the damned should sin; that God himself should choose the best; that man should follow the course which after all attracts him most. But this necessity is not opposed to contingency; it is not of the kind called logical, geometrical or metaphysical, whose opposite implies contradiction. M. Nicole has made use somewhere of a comparison which is not amiss. It is considered impossible that a wise and serious magistrate, who has not taken leave of

his senses, should publicly commit some outrageous action, as it would be, for instance, to run about the streets naked in order to make people laugh. It is the same, in a sense, with the blessed; they are still less capable of sinning, and the necessity that forbids them to sin is of the same kind. Finally I also hold that 'will' is a term as equivocal as potency and necessity. For I have already observed that those who employ this axiom, that one does not fail to do what one wills when one can, and who thence infer that God therefore does not will the salvation of all, imply a *decretory will*. Only in that sense can one support this proposition, that wisdom never wills what it knows to be among the things that shall not happen. On the other hand, one may say, taking will in a sense more general and more in conformity with customary use, that the wise will is *inclined* antecedently to all good, although it *decrees* finally to do that which is most fitting. Thus one would be very wrong to deny to God the serious and strong inclination to save all men, which Holy Scripture attributes to him; or even to attribute to him an original distaste which diverts him from the salvation of a number of persons, *odium antecedaneum*. One should rather maintain that the wise mind tends towards all good, as good, in proportion to his knowledge and his power, but that he only produces the best that can be achieved. Those who admit that, and yet deny to God the antecedent will to save all men, are wrong only in their misuse of the term, provided that they acknowledge, besides, that God gives to all help sufficient to enable them to win salvation if only they have the will to avail themselves thereof.

283. In the *dogmas* themselves held by the Disciples of St. Augustine I cannot approve the damnation of unregenerate children, nor in general damnation resulting from original sin alone. Nor can I believe that God condemns those who are without the necessary light. One may believe, with many theologians, that men receive more aid than we are aware of, were it only when they are at the point of death. It does not appear necessary either

that all those who are saved should always be saved through a grace efficacious of itself, independently of circumstances. Also I consider it unnecessary to say that all the virtues of the pagans were false or that all their actions were sins; though it be true that what does not spring from faith, or from the uprightness of the soul before God, is infected with sin, at least virtually. Finally I hold that God cannot act as if at random by an absolutely absolute decree, or by a will independent of reasonable motives. And I am persuaded that he is always actuated, in the dispensation of his grace, by reasons wherein the nature of the objects participates. Otherwise he would not act in accordance with wisdom. I grant nevertheless that these reasons are not of necessity bound up with the good or the less evil natural qualities of men, as if God gave his grace only according to these good qualities. Yet I hold, as I have explained already here, that these qualities are taken into consideration like all the other circumstances, since nothing can be neglected in the designs of supreme wisdom.

284. Save for these points, and some few others, where St. Augustine appears obscure or even repellent, it seems as though one can conform to his system. He states that from the substance of God only a God can proceed, and that thus the creature is derived from nothingness (Augustine *De Lib. Arb.* lib. 1, c. 2). That is what makes the creature imperfect, faulty and corruptible (*De Genesi ad Lit.* c. 15, *Contra Epistolam Manichaei*, c. 36). Evil comes not from nature, but from evil will (Augustine, in the whole book *On the Nature of Good*). God can command nothing that would be impossible. ‘Firmissime creditur Deum justum et bonum impossibilia non potuisse praecipere’ (*Lib. de Nat. et Grat.* c. 43,). Nemo peccat in eo, quod caveri non potest (lib. 3, *De Lib. Arb.* c. 16, 17, *lib.* 1 *Retract.* c. 11, 13, 15). Under a just God, none can be unhappy who deserves not so to be, ‘neque sub Deo justo miser esse quisquam, nisi mereatur, potest’ (lib. 1, c. 39). Free will cannot carry out God’s commands without the aid of grace (*Ep. ad*

Hilar. Caesaraugustan.). We know that grace is not given according to deserts (E, 107, 120). Man in the state of innocence had the aid necessary to enable him to do good if he wished; but the wish depended on free will, 'habebat adjutorium, per quod posset, et sine quo non vellet, sed non adjutorium quo vellet' (*Lib. de Corrept.* c. 11 et c. 10, 12). God let angels and men try what they could do by their free will, and after that what his grace and his justice could achieve (ibid. c. 10, 11, 12). Sin turned man away from God, to turn him towards creatures (lib. 1, qu. 2, *Ad Simplicium*). To take pleasure in sinning is the freedom of a slave (*Enchirid.* c. 103). 'Liberum arbitrium usque adeo in peccatore non periit, ut per illud peccent maxime omnes, qui cum delectatione peccant' (lib. 1, *Ad Bonifac.* c. 2, 3).

285. God said to Moses: 'I will be gracious to whom I will be gracious, and will shew mercy on whom I will shew mercy' (Exod. xxxiii. 19). 'So then it is not of him that willeth, nor of him that runneth, but of God that sheweth mercy' (Rom. ix. 15, 16). That does not prevent all those who have good will, and who persevere therein, from being saved. But God gives them the willing and the doing. 'Therefore hath he mercy on whom he will have mercy, and whom he will he hardeneth' (Rom. ix. 18). And yet the same Apostle says that God willeth that all men should be saved, and come to the knowledge of the truth; which I would not interpret in accordance with some passages of St. Augustine, as if it signified that no men are saved except those whose salvation he wills, or as if he would save *non singulos generum, sed genera singulorum*. But I would rather say that there is none whose salvation he willeth not, in so far as this is permitted by greater reasons. For these bring it about that God only saves those who accept the faith he has offered to them and who surrender themselves thereto by the grace he has given them, in accordance with what was consistent with the plan of his works in its entirety, than which none can be better conceived.

286. As for predestination to salvation, it includes also, according to St. Augustine, the ordinance of the means that shall lead to salvation. ‘Praedestinatio sanctorum nihil aliud est, quam praescientia et praeparatio beneficiorum Dei, quibus certissime liberantur quicunque liberantur’ (*Lib. de Persev.* c. 14). He does not then understand it there as an absolute decree; he maintains that there is a grace which is not rejected by any hardened heart, because it is given in order to remove especially the hardness of hearts (*Lib. de Praedest.* c. 8; *Lib. de Grat.* c. 13, 14). I do not find, however, that St. Augustine conveys sufficiently that this grace, which subdues the heart, is always efficacious of itself. And one might perhaps have asserted without offence to him that the same degree of inward grace is victorious in the one, where it is aided by outward circumstances, but not in the other.

287. Will is proportionate to the sense we have of the good, and follows the sense which prevails. ‘Si utrumque tantundem diligimus, nihil horum dabimus. Item: Quod amplius nos delectat, secundum id operemur necesse est’ (in c. 5, *Ad Gal.*). I have explained already how, despite all that, we have indeed a great power over our will. St. Augustine takes it somewhat differently, and in a way that does not go far, when he says that nothing is so much within our power as the action of our will. And he gives a reason which is almost tautological: for (he says) this action is ready at the moment when we will. ‘Nihil tam in nostra potestate est, quam ipsa voluntas, ea enim mox ut volumus praesto est’ (lib. 3, *De Lib. Arb.* c. 3; lib. 5, *De Civ. Dei*, c. 10). But that only means that we will when we will, and not that we will that which we wish to will. There is more reason for saying with him: ‘*aut voluntas non est, aut libera dicenda est*’ (d. 1, 3, c. 3); and that what inclines the will towards good infallibly, or certainly, does not prevent it from being free. ‘Perquam absurdum est, ut ideo dicamus non pertinere ad voluntatem [libertatem] nostram, quod beati esse volumus, quia id omnino

nolle non possumus, nescio qua bona constrictione naturae. Nec dicere audemus ideo Deum non voluntatem [libertatem], sed necessitatem habere justitiae, quia non potest velle peccare. Certe Deus ipse numquid quia peccare non potest, ideo liberum arbitrium habere negandus est?' (*De Nat. et Grat.* c. 46, 47, 48, 49). He also says aptly, that God gives the first good impulse, but that afterwards man acts also. 'Aguntur ut agant, non ut ipsi nihil agant' (*De Corrept.* c. 2).

288. I have proved that free will is the proximate cause of the evil of guilt, and consequently of the evil of punishment; although it is true that the original imperfection of creatures, which is already presented in the eternal ideas, is the first and most remote cause. M. Bayle nevertheless always disputes this use of the notion of free will; he will not have the cause of evil ascribed to it. One must listen to his objections, but first it will be well to throw further light on the nature of freedom. I have shown that freedom, according to the definition required in the schools of theology, consists in intelligence, which involves a clear knowledge of the object of deliberation, in spontaneity, whereby we determine, and in contingency, that is, in the exclusion of logical or metaphysical necessity. Intelligence is, as it were, the soul of freedom, and the rest is as its body and foundation. The free substance is self-determining and that according to the motive of good perceived by the understanding, which inclines it without compelling it: and all the conditions of freedom are comprised in these few words. It is nevertheless well to point out that the imperfection present in our knowledge and our spontaneity, and the infallible determination that is involved in our contingency, destroy neither freedom nor contingency.

289. Our knowledge is of two kinds, distinct or confused. Distinct knowledge, or *intelligence*, occurs in the actual use of reason; but the senses supply us with confused thoughts. And we may say that we are immune from bondage in so far as we act with a distinct knowledge, but that we are

the slaves of passion in so far as our perceptions are confused. In this sense we have not all the freedom of spirit that were to be desired, and we may say with St. Augustine that being subject to sin we have the freedom of a slave. Yet a slave, slave as he is, nevertheless has freedom to choose according to the state wherein he is, although more often than not he is under the stern necessity of choosing between two evils, because a superior force prevents him from attaining the goods whereto he aspires. That which in a slave is effected by bonds and constraint in us is effected by passions, whose violence is sweet, but none the less pernicious. In truth we will only that which pleases us: but unhappily what pleases us now is often a real evil, which would displease us if we had the eyes of the understanding open. Nevertheless that evil state of the slave, which is also our own, does not prevent us, any more than him, from making a free choice of that which pleases us most, in the state to which we are reduced, in proportion to our present strength and knowledge.

290. As for spontaneity, it belongs to us in so far as we have within us the source of our actions, as Aristotle rightly conceived. The impressions of external things often, indeed, divert us from our path, and it was commonly believed that, at least in this respect, some of the sources of our actions were outside ourselves. I admit that one is bound to speak thus, adapting oneself to the popular mode of expression, as one may, in a certain sense, without doing violence to truth. But when it is a question of expressing oneself accurately I maintain that our spontaneity suffers no exception and that external things have no physical influence upon us, I mean in the strictly philosophical sense.

291. For better understanding of this point, one must know that true spontaneity is common to us and all simple substances, and that in the intelligent or free substance this becomes a mastery over its actions. That cannot be better explained than by the System of Pre-established Harmony,

which I indeed propounded some years ago. There I pointed out that by nature every simple substance has perception, and that its individuality consists in the perpetual law which brings about the sequence of perceptions that are assigned to it, springing naturally from one another, to represent the body that is allotted to it, and through its instrumentality the entire universe, in accordance with the point of view proper to this simple substance and without its needing to receive any physical influence from the body. Even so the body also for its part adapts itself to the wishes of the soul by its own laws, and consequently only obeys it according to the promptings of these laws. Whence it follows that the soul has in itself a perfect spontaneity, so that it depends only upon God and upon itself in its actions.

292. As this system was not known formerly, other ways were sought for emerging from this labyrinth, and the Cartesians themselves were in difficulties over the subject of free will. They were no longer satisfied by the ‘faculties’ of the Schoolmen, and they considered that all the actions of the soul appear to be determined by what comes from without, according to the impressions of the senses, and that, ultimately, all is controlled in the universe by the providence of God. Thence arose naturally the objection that there is therefore no freedom. To that M. Descartes replied that we are assured of God’s providence by reason; but that we are likewise assured of our freedom by experience thereof within ourselves; and that we must believe in both, even though we see not how it is possible to reconcile them.

293. That was cutting the Gordian knot, and answering the conclusion of an argument not by refuting it but by opposing thereto a contrary argument. Which procedure does not conform to the laws for philosophical disputes. Notwithstanding, most of the Cartesians contented themselves with this, albeit the inward experience they adduce does not prove their assertion, as

M. Bayle has clearly shown. M. Regis (*Philos.* vol. 1, Metaph. book 2, part 2, c. 22) thus paraphrases M. Descartes' doctrine: 'Most philosophers', he says, 'have fallen into error. Some, not being able to understand the relation existing between free actions and the providence of God, have denied that God was the first efficient cause of free will: but that is sacrilegious. The others, not being able to apprehend the relation between God's efficacy and free actions, have denied that man was endowed with freedom: and that is a blasphemy. The mean to be found between these two extremes is to say' (id. ibid.) 'that, even though we were not able to understand all the relations existing between freedom and God's providence, we should nevertheless be bound to acknowledge that we are free and dependent upon God. For both these truths are equally known, the one through experience, and the other through reason; and prudence forbids one to abandon truths whereof one is assured, under the pretext that one cannot apprehend all the relations existing between them and other truths well known.'

294. M. Bayle here remarks pertinently in the margin, 'that these expressions of M. Regis fail to point out that we are aware of relations between man's actions and God's providence, such as appear to us to be incompatible with our freedom.' He adds that these expressions are over-circumspect, weakening the statement of the problem. 'Authors assume', he says, 'that the difficulty arises solely from our lack of enlightenment; whereas they ought to say that it arises in the main from the enlightenment which we have, and cannot reconcile' (in M. Bayle's opinion) 'with our Mysteries.' That is exactly what I said at the beginning of this work, that if the Mysteries were irreconcilable with reason, and if there were unanswerable objections, far from finding the mystery incomprehensible, we should comprehend that it was false. It is true that here there is no question of a mystery, but only of natural religion.

295. This is how M. Bayle combats those inward experiences, whereon the Cartesians make freedom rest: but he begins by reflexions with which I cannot agree. ‘Those who do not make profound examination’, he says (*Dictionary*, art. ‘Helen.’, lit. TΔ), ‘of that which passes within them easily persuade themselves that they are free, and that, if their will prompts them to evil, it is their fault, it is through a choice whereof they are the masters. Those who judge otherwise are persons who have studied with care the springs and the circumstances of their actions, and who have thought over the progress of their soul’s impulses. Those persons usually have doubts about their free will, and even come to persuade themselves that their reason and mind are slaves, without power to resist the force that carries them along where they would not go. It was principally persons of this kind who ascribed to the gods the cause of their evil deeds.’

296. These words remind me of those of Chancellor Bacon, who says that a little philosophy inclineth us away from God, but that depth in philosophy bringeth men’s minds about to him. It is the same with those who reflect upon their actions: it appears to them at first that all we do is only impulsion from others, and that all we apprehend comes from without through the senses, and is traced upon the void of our mind *tanquam in tabula rasa*. But more profound meditation shows us that all (even perceptions and passions) comes to us from our own inner being, with complete spontaneity.

297. Yet M. Bayle cites poets who pretend to exonerate men by laying the blame upon the gods. Medea in Ovid speaks thus:

Frustra, Medea, repugnas,
Nescio quid Deus obstat, ait.

And a little later Ovid makes her add:

Sed trahit invitam nova vis, aliudque Cupido,
Mens aliud suadet; video meliora proboque,

Deteriora sequor.

But one could set against that a passage from Vergil, who makes Nisus say with far more reason:

Di ne hunc ardorem mentibus addunt,

Euryale, an sua cuique Deus fit dira cupido?

298. Herr Wittich seems to have thought that in reality our independence is only apparent. For in his *Diss. de providentia Dei actuali* (n. 61) he makes free will consist in our being inclined towards the objects that present themselves to our soul for affirmation or denial, love or hate, in such a way that we *do not feel* we are being determined by any outward force. He adds that it is when God himself causes our volitions that we act with most freedom; and that the more efficacious and powerful God's action is upon us, the more we are masters of our actions. 'Quia enim Deus operatur ipsum velle, quo efficacius operatur, eo magis volumus; quod autem, cum volumus, facimus, id maxime habemus in nostra potestate.' It is true that when God causes a volition in us he causes a free action. But it seems to me that the question here is not of the universal cause or of that production of our will which is proper to it in so far as it is a created effect, whose positive elements are actually created continually through God's co-operation, like all other absolute reality of things. We are concerned here with the reasons for willing, and the means God uses when he gives us a good will or permits us to have an evil will. It is always we who produce it, good or evil, for it is our action: but there are always reasons that make us act, without impairing either our spontaneity or our freedom. Grace does no more than give impressions which are conducive to making will operate through fitting motives, such as would be an attention, *a dic cur hic*, a prevenient pleasure. And it is quite evident that that does not interfere with freedom, any more than could a friend who gives counsel and furnishes

motives. Thus Herr Wittich has not supplied an answer to the question, any more than M. Bayle, and recourse to God is of no avail here.

299. But let me give another much more reasonable passage from the same M. Bayle, where he disputes with greater force the so-called lively sense of freedom, which according to the Cartesians is a proof of freedom. His words are indeed full of wit, and worthy of consideration, and occur in the *Reply to the Questions of a Provincial* (vol. III, ch. 140, *seqq.*). Here they are: 'By the clear and distinct sense we have of our existence we do not discern whether we exist through ourselves or derive our being from another. We discern that only by reflexion, that is, through meditation upon our powerlessness in the matter of conserving ourselves as much as we would, and of freeing ourselves from dependence upon the beings that surround us, etc. It is indeed certain that the pagans (the same must be said of the Socinians, since they deny the creation) never attained to the knowledge of that true dogma that we were created from nothing, and that we are derived from nothingness at every moment of our continuance. They therefore thought erroneously that all substances in the universe exist of themselves and can never be reduced to nothing, and that thus they depend upon no other thing save in respect of their modifications, which are liable to be destroyed by the action of an external cause. Does not this error spring from the fact that we are unconscious of the creative action which conserves us, and that we are only conscious of our existence? That we are conscious of it, I say, in such a way that we should for ever remain ignorant of the cause of our being if other knowledge did not aid us? Let us say also, that the clear and distinct sense we have of the acts of our will cannot make us discern whether we give them ourselves to ourselves or receive them from that same cause which gives us existence. We must have recourse to reflexion or to meditation in order to effect this discrimination. Now I assert that one can never by purely philosophical meditations arrive at an

established certainty that we are the efficient cause of our volitions: for every person who makes due investigation will recognize clearly, that if we were only passive subjects with regard to will we should have the same sensations of experience as we have when we think that we are free. Assume, for the sake of argument, that God so ordered the laws of the union between soul and body that all the modalities of the soul, without a single exception, are of necessity linked together with the interposition of the modalities of the brain. You will then understand that nothing will happen to us except that of which we are conscious: there will be in our soul the same sequence of thoughts from the perception of objects of the senses, which is its first step, up to the most definite volitions, which are its final step. There will be in this sequence the consciousness of ideas, that of affirmations, that of irresolutions, that of velleities and that of volitions. For whether the act of willing be impressed upon us by an external cause or we bring it about ourselves, it will be equally true that we will, and that we feel that we will. Moreover, as this external cause can blend as much pleasure as it will with the volition which it impresses upon us, we shall be able to feel at times that the acts of our will please us infinitely, and that they lead us according to the bent of our strongest inclinations. We shall feel no constraint; you know the maxim: *voluntas non potest cogi*. Do you not clearly understand that a weather-vane, always having communicated to it simultaneously (in such a way, however, that priority of nature or, if one will, a real momentary priority, should attach to the desire for motion) movement towards a certain point on the horizon, and the wish to turn in that direction, would be persuaded that it moved of itself to fulfil the desires which it conceived? I assume that it would not know that there were winds, or that an external cause changed everything simultaneously, both its situation and its desires. That is the state we are in by our nature: we know not whether an invisible cause makes us pass sufficiently from one thought

to another. It is therefore natural that men are persuaded that they determine their own acts. But it remains to be discovered whether they are mistaken in that, as in countless other things they affirm by a kind of instinct and without having made use of philosophic meditation. Since therefore there are two hypotheses as to what takes place in man: the one that he is only a passive subject, the other that he has active virtues, one cannot in reason prefer the second to the first, so long as one can only adduce proofs of feeling. For we should feel with an equal force that we wish this or that, whether all our volitions were imprinted upon our soul by an exterior and invisible cause, or we formed them ourselves.'

300. There are here excellent arguments, which are valid against the usual systems; but they fail in respect of the System of Pre-established Harmony, which takes us further than we were able to go formerly. M. Bayle asserts, for instance, 'that by purely philosophical meditations one can never attain to an established certainty that we are the efficient cause of our volitions'. But this is a point which I do not concede to him: for the establishment of this system demonstrates beyond a doubt that in the course of nature each substance is the sole cause of all its actions, and that it is free of all physical influence from every other substance, save the customary co-operation of God. And this system shows that our spontaneity is real, and not only apparent, as Herr Wittich believed it to be. M. Bayle asserts also on the same reasons (ch. 170,) that if there were a *fatum Astrologicum* this would not destroy freedom; and I would concede that to him, if freedom consisted only in an apparent spontaneity.

301. The spontaneity of our actions can therefore no longer be questioned; and Aristotle has defined it well, saying that an action is *spontaneous* when its source is in him who acts. 'Spontaneum est, cujus principium est in agente.' Thus it is that our actions and our wills depend entirely upon us. It is true that we are not directly the masters of our will,

although we be its cause; for we do not choose volitions, as we choose our actions by our volitions. Yet we have a certain power also over our will, because we can contribute indirectly towards willing another time that which we would fain will now, as I have here already shown: that, however, is no *velleity*, properly speaking. There also we have a mastery, individual and even perceptible, over our actions and our wills, resulting from a combination of spontaneity with intelligence.

302. Up to this point I have expounded the two conditions of freedom mentioned by Aristotle, that is, *spontaneity* and *intelligence*, which are found united in us in deliberation, whereas beasts lack the second condition. But the Schoolmen demand yet a third, which they call *indifference*. And indeed one must admit it, if indifference signifies as much as 'contingency'; for I have already said here that freedom must exclude an absolute and metaphysical or logical necessity. But, as I have declared more than once, this indifference, this contingency, this non-necessity, if I may venture so to speak, which is a characteristic attribute of freedom, does not prevent one from having stronger inclinations towards the course one chooses; nor does it by any means require that one be absolutely and equally indifferent towards the two opposing courses.

303. I therefore admit indifference only in the one sense, implying the same as contingency, or non-necessity. But, as I have declared more than once, I do not admit an indifference of equipoise, and I do not think that one ever chooses when one is absolutely indifferent. Such a choice would be, as it were, mere chance, without determining reason, whether apparent or hidden. But such a chance, such an absolute and actual fortuity, is a chimera which never occurs in nature. All wise men are agreed that chance is only an apparent thing, like fortune: only ignorance of causes gives rise to it. But if there were such a vague indifference, or rather if we were to choose without having anything to prompt us to the choice, chance would then be

something actual, resembling what, according to Epicurus, took place in that little deviation of the atoms, occurring without cause or reason. Epicurus had introduced it in order to evade necessity, and Cicero with good reason ridiculed it.

304. This deviation had a final cause in the mind of Epicurus, his aim being to free us from fate; but it can have no efficient cause in the nature of things, it is one of the most impossible of chimeras. M. Bayle himself refutes it admirably, as we shall see presently. And yet it is surprising that he appears to admit elsewhere himself something of like nature with this supposed deviation: here is what he says, when speaking of Buridan's ass (*Dictionary*, art. 'Buridan', lit. 13): 'Those who advocate free will properly so called admit in man a power of determining, either to the right hand or the left, even when the motives are perfectly uniform on the side of each of the two opposing objects. For they maintain that our soul can say, without having any reason other than that of using its freedom: "I prefer this to that, although I see nothing more worthy of my choice in the one than the other".'

305. All those who admit a free will properly so called will not for that reason concede to M. Bayle this determination springing from an indeterminate cause. St. Augustine and the Thomists believe that all is determined. And one sees that their opponents resort also to the circumstances which contribute to our choice. Experience by no means approves the chimera of an indifference of equipoise; and one can employ here the argument that M. Bayle himself employed against the Cartesians' manner of proving freedom by the lively sense of our independence. For although I do not always see the reason for an inclination which makes me choose between two apparently uniform courses, there will always be some impression, however imperceptible, that determines us. The mere desire to

make use of one's freedom has no effect of specifying, or determining us to the choice of one course or the other.

306. M. Bayle goes on: 'There are at the very least two ways whereby man can extricate himself from the snares of equipoise. One, which I have already mentioned, is for a man to flatter himself with the pleasing fancy that he is master in his own house, and that he does not depend upon objects.' This way is blocked: for all that one might wish to play master in one's own house, that has no determining effect, nor does it favour one course more than the other. M. Bayle goes on: 'He would make this Act: I will prefer this to that, because it pleases me to behave thus.' But these words, 'because it pleases me', 'because such is my pleasure', imply already a leaning towards 'the object that pleases'.

307. There is therefore no justification for continuing thus: 'And so that which determined him would not be taken from the object; the motive would be derived only from the ideas men have of their own perfections, or of their natural faculties. The other way is that of the lot or chance: the short straw would decide.' This way has an outlet, but it does not reach the goal: it would alter the issue, for in such a case it is not man who decides. Or again if one maintains that it is still the man who decides by lot, man himself is no longer in equipoise, because the lot is not, and the man has attached himself to it. There are always reasons in Nature which cause that which happens by chance or through the lot. I am somewhat surprised that a mind so shrewd as M. Bayle's could have allowed itself to be so misled on this point. I have set out elsewhere the true rejoinder to the Buridan sophism: it is that the case of perfect equipoise is impossible, since the universe can never be halved, so as to make all impressions equivalent on both sides.

308. Let us see what M. Bayle himself says elsewhere against the chimerical or absolutely undefined indifference. Cicero had said (in his

book *De Fato*) that Carneades had found something more subtle than the deviation of atoms, attributing the cause of a so-called absolutely undefined indifference to the voluntary motions of souls, because these motions have no need of an external cause, coming as they do from our nature. But M. Bayle (*Dictionary*, art. 'Epicurus',) aptly replies that all that which springs from the nature of a thing is determined: thus determination always remains, and Carneades' evasion is of no avail.

309. He shows elsewhere (*Reply to the Questions of a Provincial*, ch. 90, l. 2,) 'that a freedom far removed from this so-called equipoise is incomparably more beneficial. I mean', he says, 'a freedom such as may always follow the judgements of the mind, and such as cannot resist objects clearly recognized as good. I know of no people who do not agree that truth clearly recognized necessitates' (determines rather, unless one speak of a moral necessity) 'the assent of the soul; experience teaches us that. In the schools they teach constantly that as the true is the object of the understanding, so the good is the object of the will. So likewise they teach that as the understanding can never affirm anything save that which is shown to it under the semblance of truth, the will can never love anything which to it does not appear to be good. One never believes the false as such, and one never loves evil as evil. There is in the understanding a natural determination towards the true in general, and towards each individual truth clearly recognized. There is in the will a natural determination towards good in general; whence many philosophers conclude that from the moment when individual goods are clearly recognized by us we are of necessity compelled to love them. The understanding suspends its actions only when its objects show themselves obscurely, so that there is cause for doubt as to whether they are false or true. That leads many persons to the conclusion that the will remains in equipoise only when the soul is uncertain whether the object presented to it is a good with regard to it; but that also, the

moment the soul decides in the affirmative, it of necessity clings to that object until other judgements of the mind determine it otherwise. Those who expound freedom in this fashion think to find therein plentiful enough material for merit or demerit. For they assume that these judgements of the mind proceed from a free attention of the soul in examining the objects, comparing them together, and discriminating between them. I must not forget that there are very learned men' (such as Bellarmine, lib. 3, *De Gratia et Libero Arbitrio*, c. 8, et 9, and Cameron, in *Responsione ad Epistolam Viri Docti, id est Episcopii*) 'who maintain with very cogent reasons that the will always of necessity follows the last practical act of the understanding.'

310. One must make some observations on this discourse. A very clear recognition of the best *determines* the will; but it does not necessitate it, properly speaking. One must always distinguish between the necessary and the certain or infallible, as I have already observed more than once, and distinguish metaphysical necessity from moral necessity. I think also that it is only God's will which always follows the judgements of the understanding: all intelligent creatures are subject to some passions, or to perceptions at least, that are not composed entirely of what I call *adequate ideas*. And although in the blessed these passions always tend towards the true good, by virtue of the laws of Nature and the system of things pre-established in relation to them, yet this does not always happen in such a way that they have a perfect knowledge of that good. It is the same with them as with us, who do not always understand the reason for our instincts. The angels and the blessed are created beings, even as we are, in whom there is always some confused perception mingled with distinct knowledge. Suarez said something similar concerning them. He thinks (*Treatise on Prayer*, book I, ch. 11) that God has so ordered things beforehand that their prayers, when they are made with a full will, always succeed: that is an

example of a pre-established harmony. As for us, in addition to the judgement of the understanding, of which we have an express knowledge, there are mingled therewith confused perceptions of the senses, and these beget passions and even imperceptible inclinations, of which we are not always aware. These movements often thwart the judgement of the practical understanding.

311. As for the parallel between the relation of the understanding to the true and that of the will to the good, one must know that a clear and distinct perception of a truth contains within it actually the affirmation of this truth: thus the understanding is necessitated in that direction. But whatever perception one may have of the good, the effort to act in accordance with the judgement, which in my opinion forms the essence of the will, is distinct from it. Thus, since there is need of time to raise this effort to its climax, it may be suspended, and even changed, by a new perception or inclination which passes athwart it, which diverts the mind from it, and which even causes it sometimes to make a contrary judgement. Hence it comes that our soul has so many means of resisting the truth which it knows, and that the passage from mind to heart is so long. Especially is this so when the understanding to a great extent proceeds only by faint *thoughts*, which have only slight power to affect, as I have explained elsewhere. Thus the connexion between judgement and will is not so necessary as one might think.

312. M. Bayle goes on to say, with truth (): ‘Indeed, it cannot be a fault in man’s soul that it has no freedom of indifference as regards good in general. It would be rather a disorder, an inordinate imperfection, if one could say truthfully: It is all one to me whether I am happy or unhappy; I have no more determination to love the good than to hate it; I can do both equally. Now if it is a praiseworthy and advantageous quality to be determinate as regards good in general, it cannot be a fault if one is

necessitated as regards each individual good recognized plainly as for our good. It seems even as though it were a necessary conclusion, that if the soul has no freedom of indifference as regards good in general, it also has none in respect of particular goods which after due examination it judges to be goods in relation to it. What should we think of a soul which, having formed that judgement, had, and prided itself on having, the power not to love these goods, and even to hate them, and which said: I recognize clearly that these are goods for me, I have all the enlightenment necessary on that point; nevertheless I will not love them, I will hate them; my decision is made, I act upon it; it is not that any reason' (that is, any other reason than that which is founded upon 'Such is my good pleasure') 'urges me thereto, but it pleases me so to behave: what should we think, I say, of such a soul? Should we not find it more imperfect and more unhappy than if it had not this freedom of indifference?

313. 'Not only does the doctrine that subjects the will to the final acts of the understanding give a more favourable idea of the state of the soul, but it shows also that it is easier to lead man to happiness along that road than along the road of indifference. It will suffice to enlighten his mind upon his true interests, and straightway his will will comply with the judgements that reason shall have pronounced. But if he has a freedom independent of reason and of the quality of objects clearly recognized, he will be the most intractable of all animals, and it will never be possible to rely upon making him choose the right course. All the counsels, all the arguments in the world may prove unavailing; you will give him explanations, you will convince his mind, and yet his will will play the haughty madam and remain motionless as a rock. Vergil, *Aen*. lib. 6, v. 470:

Non magis incepto vultum sermone movetur,
Quam si dura silex, aut stet Marpesia cautes.

A caprice, an empty whim will make her stiffen against reasons of all kinds; it will not please her to love her clearly recognized good, it will please her to hate it. Do you consider such a faculty, sir, to be the richest present God can have made to man, and the sole instrument of our happiness? Is it not rather an obstacle to our felicity? Is there cause for boasting in being able to say: "I have scorned all the judgements of my reason, and I have followed an altogether different path, simply from considerations of my own good pleasure?" With what regrets would one not be torn, in that case, if the determination made had an ill result? Such a freedom would therefore be more harmful than profitable to men, because the understanding would not present all the goodness of the objects clearly enough to deprive the will of the power of rejection. It would be therefore infinitely better for man to be always of necessity determined by the judgement of the understanding, than to permit the will to suspend its action. For by this means it would achieve its aim with greater ease and certainty.'

314. Upon this discourse I make the further observation, that it is very true that a freedom of indifference, undefined and without any determining reason, would be as harmful, and even objectionable, as it is impracticable and chimerical. The man who wished to behave thus, or at the least appear to be acting without due cause, would most certainly be looked upon as irrational. But it is very true also that the thing is impossible, when it is taken strictly in accordance with the assumption. As soon as one tries to give an example of it one misses one's aim and stumbles upon the case of a man who, while he does not come to a decision without cause, does so rather under the influence of inclination or passion than of judgement. As soon as one says: 'I scorn the judgements of my reason simply from considerations of my own good pleasure, it pleases me to behave thus', it is

as if one were to say: I prefer my inclination to my interest, my pleasure to my profit.

315. Even so some capricious man, fancying that it is ignominious for him to follow the advice of his friends or his servants, might prefer the satisfaction of contradicting them to the profit he could derive from their counsel. It may happen, however, that in a matter of small moment a wise man acts irregularly and against his own interest in order to thwart another who tries to restrain him or direct him, or that he may disconcert those who watch his steps. It is even well at times to imitate Brutus by concealing one's wit, and even to feign madness, as David did before the King of the Philistines.

316. M. Bayle admirably supplements his remarks with the object of showing that to act against the judgement of the understanding would be a great imperfection. He observes () that, even according to the Molinists, 'the understanding which does its duty well indicates that which is the best'. He introduces God (ch. 91,) saying to our first parents in the Garden of Eden: 'I have given you my knowledge, the faculty of judging things, and full power to dispose your wills. I shall give you instructions and orders; but the free will that I have bestowed upon you is of such a nature that you have equal power (according to circumstances) to obey me and to disobey me. You will be tempted: if you make a good use of your freedom you will be happy; and if you use it ill you will be unhappy. It is for you to see if you wish to ask of me, as a new grace, either that I permit you to abuse your freedom when you shall make resolve to do so, or that I prevent you from doing so. Consider carefully, I give you four and twenty hours. Do you not clearly understand' (adds M. Bayle) 'that their reason, which had not yet been obscured by sin, would have made them conclude that they must ask God, as the crowning point of the favours wherewith he had honoured them, not to permit them to destroy themselves by an ill use of their powers? And

must one not admit that if Adam, through wrongly making it a point of honour to order his own goings, had refused a divine direction that would have safeguarded his happiness, he would have been the prototype of all such as Phaeton and Icarus? He would have been well-nigh as ungodly as the Ajax of Sophocles, who wished to conquer without the aid of the gods, and who said that the most craven would put their enemies to flight with such aid.'

317. M. Bayle also shows (ch. 80) that one congratulates oneself no less, or even takes more credit to oneself, for having been aided from above, than for owing one's happiness to one's own choice. And if one does well through having preferred a tumultuous instinct, which arose suddenly, to reasons maturely considered, one feels an extraordinary joy in this; for one assumes that either God, or our Guardian Angel, or something or other which one pictures to oneself under the vague name of *good luck* has impelled us thereto. Indeed, Sulla and Caesar boasted more of their good luck than of their prudence. The pagans, and particularly the poets (Homer especially), determined their heroes' acts by divine promptings. The hero of the *Aeneid* proceeds only under the direction of a God. It was very great praise offered to the Emperors if one said that they were victorious both through their troops and through their gods whom they lent to their generals: 'Te copias, te consilium et tuos praebente Divos,' said Horace. The generals fought under the auspices of the Emperors, as if trusting to the Emperor's good luck, for subordinate officers had no rights regarding the auspices. One takes credit to oneself for being a favourite of heaven, one rates oneself more highly for the possession of good fortune than of talent. There are no people that think themselves more fortunate than the mystics, who imagine that they keep still while God acts within them.

318. 'On the other hand', M. Bayle adds (ch. 83), 'a Stoic philosopher, who attaches to everything an inevitable necessity, is as susceptible as

another man to the pleasure of having chosen well. And every man of sense will find that, far from taking pleasure in the thought of having deliberated long and finally chosen the most honourable course, one feels incredible satisfaction in persuading oneself that one is so firmly rooted in the love of virtue that without the slightest resistance one would repel a temptation. A man to whom is suggested the doing of a deed contrary to his duty, his honour and his conscience, who answers forthwith that he is incapable of such a crime, and who is certainly not capable of it, is far more contented with himself than if he asked for time to consider it, and were for some hours in a state of indecision as to which course to take. One is on many occasions regretful over not being able to make up one's mind between two courses, and one would be well pleased that the counsel of a good friend, or some succour from above, should impel us to make a good choice.' All that demonstrates for us the advantage a determinate judgement has over that vague indifference which leaves us in uncertainty. But indeed I have proved sufficiently that only ignorance or passion has power to keep us in doubt, and have thus given the reason why God is never in doubt. The nearer one comes to him, the more perfect is freedom, and the more it is determined by the good and by reason. The character of Cato, of whom Velleius said that it was impossible for him to perform a dishonourable action, will always be preferred to that of a man who is capable of wavering.

319. I have been well pleased to present and to support these arguments of M. Bayle against vague indifference, as much for the elucidation of the subject as to confront him with himself, and to demonstrate that he ought therefore not to complain of the alleged necessity imposed upon God, of choosing the best way that is possible. For either God will act through a vague indifference and at random, or again he will act on caprice or through some other passion, or finally he must act through a prevailing inclination of reason which prompts him to the best. But passions, which come from

the confused perception of an apparent good, cannot occur in God; and vague indifference is something chimerical. It is therefore only the strongest reason that can regulate God's choice. It is an imperfection in our freedom that makes us capable of choosing evil instead of good, a greater evil instead of the lesser evil, the lesser good instead of the greater good. That arises from the appearances of good and evil, which deceive us; whereas God is always prompted to the true and the greatest good, that is, to the absolutely true good, which he cannot fail to know.

320. This false idea of freedom, conceived by those who, not content with exempting it, I do not say from constraint, but from necessity itself, would also exempt it from certainty and determination, that is, from reason and perfection, nevertheless pleased some Schoolmen, people who often become entangled in their own subtleties, and take the straw of terms for the grain of things. They assume some chimerical notion, whence they think to derive some use, and which they endeavour to maintain by quibblings. Complete indifference is of this nature: to concede it to the will is to grant it a privilege of the kind that some Cartesians and some mystics find in the divine nature, of being able to do the impossible, to produce absurdities, to cause two contradictory propositions to be true simultaneously. To claim that a determination comes from a complete indifference absolutely indeterminate is to claim that it comes naturally from nothing. Let it be assumed that God does not give this determination: it has accordingly no fountainhead in the soul, nor in the body, nor in circumstances, since all is assumed to be indeterminate; and yet there it is, appearing and existing without preparation, nothing making ready for it, no angel, not even God himself, being able to see or to show how it exists. That would be not only the emergence of something from nothing, but its emergence thence *of itself*. This doctrine introduces something as preposterous as the theory already mentioned, of the deviation of atoms, whereby Epicurus asserted

that one of these small bodies, going in a straight line, would turn aside all at once from its path, without any reason, simply because the will so commands. Take note moreover that he resorted to that only to justify this alleged freedom of complete indifference, a chimerical notion which appears to be of very ancient origin; and one may with good reason say: *Chimaera Chimaeram parit*.

321. This is the way Signor Marchetti has expressed it in his admirable translation of Lucretius into Italian verse, which has not yet been published (Book 2):

Mà ch'i principii poi non corran punto
Della lor dritta via, chi veder puote?
Sì finalmente ogni lor moto sempre
Insieme s'aggruppa, e dall' antico
Sempre con ordin certo il nuovo nasce;
Ne tracciando i primi semi, fanno
Di moto un tal principio, il qual poi rompa
I decreti del fato, acciò non segua
L'una causa dell' altra in infinito;
Onde han questa, dich' io, del fato sciolta
Libera voluntà, *per cui ciascuno*
Va dove più l'agrada? I moti ancora
Si declinan sovente, e non in tempo
Certo, ne certa region, mà solo
Quando e dove commanda il nostro arbitrio;
Poiche senz' alcun dubbio à queste cose
Dà sol principio il voler proprio, e quindi
Van poi scorrendo per le membra i moti.

It is comical that a man like Epicurus, after having discarded the gods and all incorporeal substances, could have supposed that the will, which he

himself takes as composed of atoms, could have had control over the atoms, and diverted them from their path, without its being possible for one to say how.

322. Carneades, not going so far back as to the atoms, claimed to find at once in the soul of man the reason for the so-called vague indifference, assuming as reason for the thing just that for which Epicurus sought a reason. Carneades gained nothing thereby, except that he more easily deceived careless people, in transferring the absurdity from one subject, where it is somewhat too evident, to another subject where it is easier to confuse matters, that is to say, from the body to the soul. For most philosophers had not very distinct notions of the nature of the soul. Epicurus, who composed it of atoms, was at least right in seeking the origin of its determination in that which he believed to be the origin of the soul itself. That is why Cicero and M. Bayle were wrong to find so much fault with him, and to be indulgent towards, and even praise, Carneades, who is no less irrational. I do not understand how M. Bayle, who was so clear-sighted, was thus satisfied by a disguised absurdity, even to the extent of calling it the greatest effort the human mind can make on this matter. It is as if the soul, which is the seat of reason, were more capable than the body of acting without being determined by some reason or cause, internal or external; or as if the great principle which states that nothing comes to pass without cause only related to the body.

323. It is true that the Form or the Soul has this advantage over matter, that it is the source of action, having within itself the principle of motion or of change, in a word, το αυτοκινητον, as Plato calls it; whereas matter is simply passive, and has need of being impelled to act, *agitur, ut agat*. But if the soul is active of itself (as it indeed is), for that very reason it is not of itself absolutely indifferent to the action, like matter, and it must find in itself a ground of determination. According to the System of Pre-established

Harmony the soul finds in itself, and in its ideal nature anterior to existence, the reasons for its determinations, adjusted to all that shall surround it. That way it was determined from all eternity in its state of mere possibility to act freely, as it does, when it attains to existence.

324. M. Bayle himself remarks aptly that freedom of indifference (such as must be admitted) does not exclude inclinations and does not demand equipoise. He demonstrates amply enough (*Reply to the Questions of a Provincial*, ch. 139, *seqq*.) that the soul may be compared to a balance, where reasons and inclinations take the place of weights. According to him, one can explain what passes in our resolutions by the hypothesis that the will of man is like a balance which is at rest when the weights of its two pans are equal, and which always inclines either to one side or the other according to which of the pans is the more heavily laden. A new reason makes a heavier weight, a new idea shines more brightly than the old; the fear of a heavy penalty prevails over some pleasure; when two passions dispute the ground, it is always the stronger which gains the mastery, unless the other be assisted by reason or by some other contributing passion. When one flings away merchandise in order to save oneself, the action, which the Schoolmen call mixed, is voluntary and free; and yet love of life indubitably prevails over love of possessions. Grief arises from remembrance of lost possessions, and one has all the greater difficulty in making one's resolve, the nearer the approach to even weight in the opposing reasons, as also we see that the balance is determined more promptly when there is a great difference between the weights.

325. Nevertheless, as very often there are divers courses to choose from, one might, instead of the balance, compare the soul with a force which puts forth effort on various sides simultaneously, but which acts only at the spot where action is easiest or there is least resistance. For instance, air if it is compressed too firmly in a glass vessel will break it in order to escape. It

puts forth effort at every part, but finally flings itself upon the weakest. Thus do the inclinations of the soul extend over all the goods that present themselves: they are antecedent acts of will; but the consequent will, which is their result, is determined in the direction of that which touches most closely.

326. This ascendancy of inclinations, however, does not prevent man from being master in his own domain, provided that he knows how to make use of his power. His dominion is that of reason: he has only to prepare himself in good time to resist the passions, and he will be capable of checking the vehemence of the most furious. Let us assume that Augustus, about to give orders for putting to death Fabius Maximus, acts, as is his wont, upon the advice a philosopher had given him, to recite the Greek alphabet before doing anything in the first heat of his anger: this reflexion will be capable of saving the life of Fabius and the glory of Augustus. But without some fortunate reflexion, which one owes sometimes to a special divine mercy, or without some skill acquired beforehand, like that of Augustus, calculated to make us reflect fittingly as to time and place, passion will prevail over reason. The driver is master over the horses if he controls them as he should, and as he can; but there are occasions when he becomes negligent, and then for a time he will have to let go the reins:

Fertur equis auriga, nec audit currus habenas.

327. One must admit that there is always within us enough power over our will, but we do not always bethink ourselves of employing it. That shows, as I have observed more than once, that the power of the soul over its inclinations is a control which can only be exercised in an *indirect* manner, almost as Bellarmine would have had the Popes exercise rights over the temporal power of kings. In truth, the external actions that do not exceed our powers depend absolutely upon our will; but our volitions depend upon our will only through certain artful twists which give us means

of suspending our resolutions, or of changing them. We are masters in our own house, not as God is in the world, he having but to speak, but as a wise prince is in his dominions or as a good father of a family is in his home. M. Bayle sometimes takes the matter differently, as though we must have, in order to boast of a free will, an absolute power over ourselves, independent of reasons and of means. But even God has not such a power, and must not have in this sense, in relation to his will: he cannot change his nature, nor act otherwise than according to method; and how could man transform himself all of a sudden? I have already said God's dominion, the dominion of wisdom, is that of reason. It is only God, however, who always wills what is most to be desired, and consequently he has no need of the power to change his will. 328. If the soul is mistress in its own house (says M. Bayle,) it has only to will, and straightway that vexation and pain which is attendant upon victory over the passions will vanish away. For this effect it would suffice, in his opinion, to give oneself indifference to the objects of the passions (). Why, then, do men not give themselves this indifference (he says), if they are masters in their own house? But this objection is exactly as if I were to ask why a father of a family does not give himself gold when he has need thereof? He can acquire some, but through skill, and not, as in the age of the fairies, or of King Midas, through a mere command of the will or by his touch. It would not suffice to be master in one's own house; one must be master of all things in order to give oneself all that one wishes; for one does not find everything in one's own house. Working thus upon oneself, one must do as in working upon something else; one must have knowledge of the constitution and the qualities of one's object, and adapt one's operations thereto. It is therefore not in a moment and by a mere act of the will that one corrects oneself, and that one acquires a better will.

329. Nevertheless it is well to observe that the vexations and pains attendant upon victory over the passions in some people turn into pleasure, through the great satisfaction they find in the lively sense of the force of their mind, and of the divine grace. Ascetics and true mystics can speak of this from experience; and even a true philosopher can say something thereof. One can attain to that happy state, and it is one of the principal means the soul can use to strengthen its dominion.

330. If the Scotists and the Molinists appear to favour vague indifference (appear, I say, for I doubt whether they do so in reality, once they have learnt to know it), the Thomists and the disciples of Augustine are for predetermination. For one must have either the one or the other. Thomas Aquinas is a writer who is accustomed to reason on sound principles, and the subtle Scotus, seeking to contradict him, often obscures matters instead of throwing light upon them. The Thomists as a general rule follow their master, and do not admit that the soul makes its resolve without the existence of some predetermination which contributes thereto. But the predetermination of the new Thomists is not perhaps exactly that which one needs. Durand de Saint-Pourçain, who often enough formed a party of his own, and who opposed the idea of the special co-operation of God, was nevertheless in favour of a certain predetermination. He believed that God saw in the state of the soul, and of its surroundings, the reason for his determinations.

331. The ancient Stoics were in that almost of the same opinion as the Thomists. They were at the same time in favour of determination and against necessity, although they have been accused of attaching necessity to everything. Cicero says in his book *De Fato* that Democritus, Heraclitus, Empedocles and Aristotle believed that fate implied necessity; that others were opposed to that (he means perhaps Epicurus and the Academicians); and that Chrysippus sought a middle course. I think that Cicero is mistaken

as regards Aristotle, who fully recognized contingency and freedom, and went even too far, saying (inadvertently, as I think) that propositions on contingent futurities had no determinate truth; on which point he was justifiably abandoned by most of the Schoolmen. Even Cleanthes, the teacher of Chrysippus, although he upheld the determinate truth of future events, denied their necessity. Had the Schoolmen, so fully convinced of this determination of contingent futurities (as were for instance the Fathers of Coimbra, authors of a famous Course of Philosophy), seen the connexion between things in the form wherein the System of General Harmony proclaims it, they would have judged that one cannot admit preliminary certainty, or determination of futurition, without admitting a predetermination of the thing in its causes and in its reasons.

332. Cicero has endeavoured to expound for us the middle course taken by Chrysippus; but Justus Lipsius observed, in his *Stoic Philosophy*, that the passage from Cicero was mutilated, and that Aulus Gellius has preserved for us the whole argument of the Stoic philosopher (*Noct. Att.* lib. 6, c. 2). Here it is in epitome. Fate is the inevitable and eternal connexion of all events. Against this is urged in objection, that it follows that the acts of the will would be necessary, and that criminals, being coerced into evil, should not be punished. Chrysippus answers that evil springs from the original constitution of souls, which forms part of the destined sequence; that souls which are of a good natural disposition offer stronger resistance to the impressions of external causes; but that those whose natural defects had not been corrected by discipline allowed themselves to be perverted. Next he distinguishes (according to Cicero) between principal causes and accessary causes, and uses the comparison of a cylinder, whose rotatory force and speed or ease in motion comes chiefly from its shape, whereas it would be retarded by any roughness in formation. Nevertheless it has need of

impulsion, even as the soul needs to be acted upon by the objects of the senses, and receives this impression according to its own constitution.

333. Cicero considers that Chrysippus becomes so confused that, whether he will or no, he confirms the necessity of fate. M. Bayle is almost of the same opinion (*Dictionary*, art. 'Chrysippus', lit. H). He says that this philosopher does not get out of the bog, since the cylinder is regular or uneven according to what the craftsman has made it; and thus God, providence, fate will be the causes of evil in such a way as to render it necessary. Justus Lipsius answers that, according to the Stoics, evil came from matter. That is (to my mind) as if he had said that the stone on which the craftsman worked was sometimes too rough and too irregular to produce a good cylinder. M. Bayle cites against Chrysippus the fragments of Onomaus and Diogenianus that Eusebius has preserved for us in the *Praeparatio Evangelica* (lib. 6, c. 7, 8); and above all he relies upon Plutarch's refutation in his book against the Stoics, quoted art. 'Paulicians', lit. G. But this refutation does not amount to very much. Plutarch maintains that it would be better to deny power to God than to impute to him the permission of evils; and he will not admit that evil may serve a greater good. I have already shown, on the contrary, that God cannot but be all-powerful, even though he can do no better than produce the best, which includes the permission of evil. Moreover, I have pointed out repeatedly that what is to the disadvantage of a part taken separately may serve the perfection of the whole.

334. Chrysippus had already made an observation to this effect, not only in his fourth book on Providence, as given by Aulus Gellius (lib. 6, c. 1) where he asserts that evil serves to bring the good to notice (a reason which is not sufficient here), but still better when he applies the comparison of a stage play, in his second book on Nature (as Plutarch quotes it himself). There he says that there are sometimes portions in a comedy which are of

no worth in themselves and which nevertheless lend grace to the whole poem. He calls these portions epigrams or inscriptions. We have not enough acquaintance with the nature of the ancient comedy for full understanding of this passage from Chrysippus; but since Plutarch assents to the fact, there is reason to believe that this comparison was not a poor one. Plutarch replies in the first place that the world is not like a play to provide entertainment. But that is a poor answer: the comparison lies in this point alone, that one bad part may make the whole better. He replies secondly that this bad passage is only a small part of the comedy, whereas human life swarms with evils. This reply is of no value either: for he ought to have taken into account that what we know is also a very small part of the universe.

335. But let us return to the cylinder of Chrysippus. He is right in saying that vice springs from the original constitution of some minds. He was met with the objection that God formed them, and he could only reply by pointing to the imperfection of matter, which did not permit God to do better. This reply is of no value, for matter in itself is indifferent to all forms, and God made it. Evil springs rather from the *Forms* themselves in their detached state, that is, from the ideas that God has not produced by an act of his will, any more than he thus produced numbers and figures, and all possible essences which one must regard as eternal and necessary; for they are in the ideal region of the possibles, that is, in the divine understanding. God is therefore not the author of essences in so far as they are only possibilities. But there is nothing actual to which he has not decreed and given existence; and he has permitted evil because it is involved in the best plan existing in the region of possibles, a plan which supreme wisdom could not fail to choose. This notion satisfies at once the wisdom, the power and the goodness of God, and yet leaves a way open for the entrance of evil. God gives perfection to creatures in so far as it is

possible in the universe. One gives a turn to the cylinder, but any roughness in its shape restricts the swiftness of its motion. This comparison made by Chrysippus does not greatly differ from mine, which was taken from a laden boat that is carried along by the river current, its pace becoming slower as the load grows heavier. These comparisons tend towards the same end; and that shows that if we were sufficiently informed concerning the opinions of ancient philosophers, we should find therein more reason than is supposed.

336. M. Bayle himself commends the passage from Chrysippus (art. 'Chrysippus', lit. T) that Aulus Gellius quotes in the same place, where this philosopher maintains that evil has come *by concomitance.* That also is made clear by my system. For I have demonstrated that the evil which God permitted was not an object of his will, as an end or a means, but simply as a condition, since it had to be involved in the best. Yet one must confess that the cylinder of Chrysippus does not answer the objection of necessity. He ought to have added, in the first place, that it is by the free choice of God that some of the possibles exist; secondly, that rational creatures act freely also, in accordance with their original nature, which existed already in the eternal ideas; and lastly, that the motive power of good inclines the will without compelling it.

337. The advantage of freedom which is in the creature without doubt exists to an eminent degree in God. That must be understood in so far as it is genuinely an advantage and in so far as it presupposes no imperfection. For to be able to make a mistake and go astray is a disadvantage, and to have control over the passions is in truth an advantage, but one that presupposes an imperfection, namely passion itself, of which God is incapable. Scotus was justified in saying that if God were not free and exempt from necessity, no creature would be so. But God is incapable of being indeterminate in anything whatsoever: he cannot be ignorant, he cannot doubt, he cannot suspend his judgement; his will is always decided,

and it can only be decided by the best. God can never have a primitive particular will, that is, independent of laws or general acts of will; such a thing would be unreasonable. He cannot determine upon Adam, Peter, Judas or any individual without the existence of a reason for this determination; and this reason leads of necessity to some general enunciation. The wise mind always acts *according to principles*; always *according to rules*, and never *according to exceptions*, save when the rules come into collision through opposing tendencies, where the strongest carries the day: or else, either they will stop one another or some third course will emerge as a result. In all these cases one rule serves as an exception to the other, and there are never any *original exceptions* with one who always acts in a regular way.

338. If there are people who believe that election and reprobation are accomplished on God's part by a despotic absolute power, not only without any apparent reason but actually without any reason, even a concealed one, they maintain an opinion that destroys alike the nature of things and the divine perfections. Such an *absolutely absolute decree* (so to speak) would be without doubt insupportable. But Luther and Calvin were far from such a belief: the former hopes that the life to come will make us comprehend the just reasons of God's choice; and the latter protests explicitly that these reasons are just and holy, although they be unknown to us. I have already in that connexion quoted Calvin's treatise on predestination, and here are the actual words: 'God before the fall of Adam had reflected upon what he had to do, and that for causes concealed from us.... It is evident therefore that he had just causes for the reprobation of some of mankind, but causes to us unknown.'

339. This truth, that all God does is reasonable and cannot be better done, strikes at the outset every man of good sense, and extorts, so to speak, his approbation. And yet the most subtle of philosophers have a fatal

propensity for offending sometimes without observing it, during the course and in the heat of disputes, against the first principles of good sense, when these are shrouded in terms that disguise them. We have here already seen how the excellent M. Bayle, with all his shrewdness, has nevertheless combated this principle which I have just indicated, and which is a sure consequence of the supreme perfection of God. He thought to defend in that way the cause of God and to exempt him from an imaginary necessity, by leaving him the freedom to choose from among various goods the least. I have already spoken of M. Diroys and others who have also been deluded by this strange opinion, one that is far too commonly accepted. Those who uphold it do not observe that it implies a wish to preserve for, or rather bestow upon, God a false freedom, which is the freedom to act unreasonably. That is rendering his works subject to correction, and making it impossible for us to say or even to hope that anything reasonable can be said upon the permission of evil.

340. This error has much impaired M. Bayle's arguments, and has barred his way of escape from many perplexities. That appears again in relation to the laws of the realm of Nature: he believes them to be arbitrary and indifferent, and he objects that God could better have attained his end in the realm of grace if he had not clung to these laws, if he had more often dispensed with their observance, or even if he had made others. He believed this especially with regard to the law of the union between the soul and the body. For he is persuaded, with the modern Cartesians, that the ideas of the perceptible qualities that God gives (according to them) to the soul, occasioned by movements of the body, have nothing representing these movements or resembling them. Accordingly it was a purely arbitrary act on God's part to give us the ideas of heat, cold, light and other qualities which we experience, rather than to give us quite different ideas occasioned in the same way. I have often wondered that people so talented should have

been capable of relishing notions so unphilosophic and so contrary to the fundamental maxims of reason. For nothing gives clearer indication of the imperfection of a philosophy than the necessity experienced by the philosopher to confess that something comes to pass, in accordance with his system, for which there is no reason. That applies to the idea of Epicurus on the deviation of atoms. Whether it be God or Nature that operates, the operation will always have its reasons. In the operations of Nature, these reasons will depend either upon necessary truths or upon the laws that God has found the most reasonable; and in the operations of God, they will depend upon the choice of the supreme reason which causes them to act.

341. M. Regis, a famous Cartesian, had asserted in his 'Metaphysics' (part 2, book 2, c. 29) that the faculties God has given to men are the most excellent that they were capable of in conformity with the general order of nature. 'Considering only', he says, 'the power of God and the nature of man by themselves, it is very easy to conceive that God could have made man more perfect: but if one will consider man, not in himself and separately from all other creatures, but as a member of the universe and a portion which is subject to the general laws of motions, one will be bound to acknowledge that man is as perfect as he could have been.' He adds 'that we cannot conceive that God could have employed any other means more appropriate than pain for the conservation of our bodies'. M. Regis is right in a general way in saying that God cannot do better than he has done in relation to all. And although there be apparently in some places in the universe rational animals more perfect than man, one may say that God was right to create every kind of species, some more perfect than others. It is perhaps not impossible that there be somewhere a species of animals much resembling man and more perfect than we are. It may be even that the human race will attain in time to a greater perfection than that which we can now envisage. Thus the laws of motions do not prevent man from being

more perfect: but the place God has assigned to man in space and in time limits the perfections he was able to receive.

342. I also doubt, with M. Bayle, whether pain be necessary in order to warn men of peril. But this writer goes too far (*Reply to the Questions of a Provincial*, vol. II, ch. 77,): he seems to think that a feeling of pleasure could have the same effect, and that, in order to prevent a child from going too near the fire, God could give him ideas of pleasure in proportion to the distance he kept from it. This expedient does not appear very practicable with regard to all evils, unless a miracle were involved. It is more natural that what if it were too near would cause an evil should cause some foreboding of evil when it is a little less near. Yet I admit that it is possible such a foreboding will be something less than pain, and usually this is the case. Thus it indeed appears that pain is not necessary for causing one to shun present peril; it is wont rather to serve as a penalty for having actually plunged into evil, and a warning against further lapse. There are also many painful evils the avoidance whereof rests not with us. As a dissolution of the continuity of our body is a consequence of many accidents that may happen to us, it was natural that this imperfection of the body should be represented by some sense of imperfection in the soul. Nevertheless I would not guarantee that there were no animals in the universe whose structure was cunning enough to cause a sense of indifference as accompaniment to this dissolution of continuity, as for instance when a gangrenous limb is cut off; or even a sense of pleasure, as if one were only scratching oneself. For the imperfection that attends the dissolution of the body might lead to the sense of a greater perfection, which was suspended or checked by the continuity which is now broken: and in this respect the body would be as it were a prison.

343. There is also nothing to preclude the existence in the universe of animals resembling that one which Cyrano de Bergerac encountered in the

sun. The body of this animal being a sort of fluid composed of innumerable small animals, that were capable of ranging themselves in accordance with the desires of the great animal, by this means it transformed itself in a moment, just as it pleased; and the dissolution of continuity caused it no more hurt than the stroke of an oar can cause to the sea. But, after all, these animals are not men, they are not in our globe or in our present century; and God's plan ensured that there should not be lacking here on earth a rational animal clothed in flesh and bones, whose structure involves susceptibility to pain.

344. But M. Bayle further opposes this on another principle, one which I have already mentioned. It seems that he thinks the ideas which the soul conceives in relation to the feelings of the body are arbitrary. Thus God might have caused the dissolution of continuity to give us pleasure. He even maintains that the laws of motion are entirely arbitrary. 'I would wish to know', he says (vol. III, ch. 166,), 'whether God established by an act of his freedom of indifference general laws on the communication of movements, and the particular laws on the union of the human soul with an organic body? In this case, he could have established quite different laws, and adopted a system whose results involved neither moral evil nor physical evil. But if the answer is given that God was constrained by supreme wisdom to establish the laws that he has established, there we have neither more nor less than the *Fatum* of the Stoics. Wisdom will have marked out a way for God, the abandonment whereof will have been as impossible to him as his own self-destruction.' This objection has been sufficiently overthrown: it is only a moral necessity; and it is always a happy necessity to be bound to act in accordance with the rules of perfect wisdom.

345. Moreover, it appears to me that the reason for the belief held by many that the laws of motion are arbitrary comes from the fact that few people have properly examined them. It is known now that M. Descartes

was much mistaken in his statement of them. I have proved conclusively that conservation of the same quantity of motion cannot occur, but I consider that the same quantity of force is conserved, whether absolute or directive and respective, whether total or partial. My principles, which carry this subject as far as it can go, have not yet been published in full; but I have communicated them to friends competent to judge of them, who have approved them, and have converted some other persons of acknowledged erudition and ability. I discovered at the same time that the laws of motion actually existing in Nature, and confirmed by experiments, are not in reality absolutely demonstrable, as a geometrical proposition would be; but neither is it necessary that they be so. They do not spring entirely from the principle of necessity, but rather from the principle of perfection and order; they are an effect of the choice and the wisdom of God. I can demonstrate these laws in divers ways, but must always assume something that is not of an absolutely geometrical necessity. Thus these admirable laws are wonderful evidence of an intelligent and free being, as opposed to the system of absolute and brute necessity, advocated by Strato or Spinoza.

346. I have found that one may account for these laws by assuming that the effect is always equal in force to its cause, or, which amounts to the same thing, that the same force is conserved always: but this axiom of higher philosophy cannot be demonstrated geometrically. One may again apply other principles of like nature, for instance the principle that action is always equal to reaction, one which assumes in things a distaste for external change, and cannot be derived either from extension or impenetrability; and that other principle, that a simple movement has the same properties as those which might belong to a compound movement such as would produce the same phenomena of locomotion. These assumptions are very plausible, and are successful as an explanation of the laws of motion: nothing is so appropriate, all the more since they are in accord with each

other. But there is to be found in them no absolute necessity, such as may compel us to admit them, in the way one is compelled to admit the rules of logic, of arithmetic and geometry.

347. It seems, when one considers the indifference of matter to motion and to rest, that the largest body at rest could be carried along without any resistance by the smallest body in motion, in which case there would be action without reaction and an effect greater than its cause. There is also no necessity to say of the motion of a ball which runs freely on an even, horizontal plane, with a certain degree of speed, termed A, that this motion must have the properties of that motion which it would have if it were going with lesser speed in a boat, itself moving in the same direction with the residue of the speed, to ensure that the ball, seen from the bank, advance with the same degree A. For, although the same appearance of speed and of direction results through this medium of the boat, it is not because it is the same thing. Nevertheless it happens that the effects of the collision of the balls in the boat, the motion in each one separately combined with that of the boat giving the appearance of that which goes on outside the boat, also give the appearance of the effects that these same balls colliding would have outside the boat. All that is admirable, but one does not see its absolute necessity. A movement on the two sides of the right-angled triangle composes a movement on the hypotenuse; but it does not follow that a ball moving on the hypotenuse must produce the effect of two balls of its own size moving on the two sides: yet that is true. Nothing is so appropriate as this result, and God has chosen the laws that produce it: but one sees no geometrical necessity therein. Yet it is this very lack of necessity which enhances the beauty of the laws that God has chosen, wherein divers admirable axioms exist in conjunction, and it is impossible for one to say which of them is the primary.

348. I have also shown that therein is observed that excellent law of continuity, which I have perhaps been the first to state, and which is a kind of touchstone whose test the rules of M. Descartes, of Father Fabry, Father Pardies, Father de Malebranche and others cannot pass. In virtue of this law, one must be able to regard rest as a movement vanishing after having continually diminished, and likewise equality as an inequality that vanishes also, as would happen through the continual diminution of the greater of two unequal bodies, while the smaller retains its size. As a consequence of this consideration, the general rule for unequal bodies, or bodies in motion, must apply also to equal bodies or to bodies one of which is at rest, as to a particular case of the rule. This does result in the true laws of motion, and does not result in certain laws invented by M. Descartes and by some other men of talent, which already on that score alone prove to be ill-concerted, so that one may predict that experiment will not favour them.

349. These considerations make it plain that the laws of Nature regulating movements are neither entirely necessary nor entirely arbitrary. The middle course to be taken is that they are a choice of the most perfect wisdom. And this great example of the laws of motion shows with the utmost clarity how much difference there is between these three cases, to wit, firstly *an absolute necessity*, metaphysical or geometrical, which may be called blind, and which does not depend upon any but efficient causes; in the second place, *a moral necessity*, which comes from the free choice of wisdom in relation to final causes; and finally in the third place, *something absolutely arbitrary*, depending upon an indifference of equipoise, which is imagined, but which cannot exist, where there is no sufficient reason either in the efficient or in the final cause. Consequently one must conclude how mistaken it is to confuse either that which is absolutely necessary with that which is determined by the reason of the best, or the freedom that is determined by reason with a vague indifference.

350. This also settles M. Bayle's difficulty, for he fears that, if God is always determinate, Nature could dispense with him and bring about that same effect which is attributed to him, through the necessity of the order of things. That would be true if the laws of motion for instance, and all the rest, had their source in a geometrical necessity of efficient causes; but in the last analysis one is obliged to resort to something depending upon final causes and upon what is fitting. This also utterly destroys the most plausible reasoning of the Naturalists. Dr. Johann Joachim Becher, a German physician, well known for his books on chemistry, had composed a prayer which looked like getting him into trouble. It began: 'O sancta mater natura, aeterne rerum ordo'. And it ended by saying that this Nature must forgive him his errors, since she herself was their cause. But the nature of things, if taken as without intelligence and without choice, has in it nothing sufficiently determinant. Herr Becher did not sufficiently take into account that the Author of things (*natura naturans*) must be good and wise, and that we can be evil without complicity on his part in our acts of wickedness. When a wicked man exists, God must have found in the region of possibles the idea of such a man forming part of that sequence of things, the choice of which was demanded by the greatest perfection of the universe, and in which errors and sins are not only punished but even repaired to greater advantage, so that they contribute to the greatest good.

351. M. Bayle, however, has extended the free choice of God a little too far. Speaking of the Peripatetic Strato (*Reply to the Questions of a Provincial*, vol. III, ch. 180,), who asserted that everything had been brought forth by the necessity of a nature devoid of intelligence, he maintains that this philosopher, on being asked why a tree has not the power to form bones and veins, might have asked in his turn: Why has matter precisely three dimensions? why should not two have sufficed for it? why has it not four? 'If one had answered that there can be neither more nor less

than three dimensions he would have demanded the cause of this impossibility.' These words lead one to believe that M. Bayle suspected that the number of the dimensions of matter depended upon God's choice, even as it depended upon him to cause or not to cause trees to produce animals. Indeed, how do we know whether there are not planetary globes or earths situated in some more remote place in the universe where the fable of the Barnacle-geese of Scotland (birds that were said to be born of trees) proves true, and even whether there are not countries where one could say:

... populos umbrosa creavit

Fraxinus, et foeta viridis puer excidit alno?

But with the dimensions of matter it is not thus: the ternary number is determined for it not by the reason of the best, but by a geometrical necessity, because the geometricians have been able to prove that there are only three straight lines perpendicular to one another which can intersect at one and the same point. Nothing more appropriate could have been chosen to show the difference there is between the moral necessity that accounts for the choice of wisdom and the brute necessity of Strato and the adherents of Spinoza, who deny to God understanding and will, than a consideration of the difference existing between the reason for the laws of motion and the reason for the ternary number of the dimensions: for the first lies in the choice of the best and the second in a geometrical and blind necessity.

352. Having spoken of the laws of bodies, that is, of the rules of motion, let us come to the laws of the union between body and soul, where M. Bayle believes that he finds again some vague indifference, something absolutely arbitrary. Here is the way he speaks of it in his *Reply* (vol. II, ch. 84,): 'It is a puzzling question whether bodies have some natural property of doing harm or good to man's soul. If one answers yes, one plunges into an insane labyrinth: for, as man's soul is an immaterial substance, one will be bound to say that the local movement of certain bodies is an efficient

cause of the thoughts in a mind, a statement contrary to the most obvious notions that philosophy imparts to us. If one answers no, one will be constrained to admit that the influence of our organs upon our thoughts depends neither upon the internal qualities of matter, nor upon the laws of motion, but upon an *arbitrary institution* of the creator. One must then admit that it depended altogether upon God's freedom to combine particular thoughts of our soul with particular modifications of our body, even when he had once established all the laws for the action of bodies one upon another. Whence it results that there is in the universe no portion of matter which by its proximity can harm us, save when God wills it; and consequently, that the earth is as capable as any other place of being the abode of the happy man.... In short it is evident that there is no need, in order to prevent the wrong choices of freedom, to transport man outside the earth. God could do on earth with regard to all the acts of the will what he does in respect of the good works of the predestined when he settles their outcome, whether by efficacious or by sufficient grace: and that grace, without in any way impairing freedom, is always followed by the assent of the soul. It would be as easy for him on earth as in heaven to bring about the determination of our souls to a good choice.'

353. I agree with M. Bayle that God could have so ordered bodies and souls on this globe of earth, whether by ways of nature or by extraordinary graces, that it would have been a perpetual paradise and a foretaste of the celestial state of the blessed. There is no reason why there should not be worlds happier than ours; but God had good reasons for willing that ours should be such as it is. Nevertheless, in order to prove that a better state would have been possible here, M. Bayle had no need to resort to the system of occasional causes: it abounds in miracles and in hypotheses for which their very originators confess there is no justification; and these are two defects such as will most of all estrange a system from true philosophy.

It is a cause for surprise, in the first place, that M. Bayle did not bethink himself of the System of Pre-established Harmony which he had examined before, and which for this matter was so opportune. But as in this system all is connected and harmonious, all following from reasons and nothing being left incomplete or exposed to the rash discretion of perfect indifference, it seems that it was not pleasing to M. Bayle: for he was here somewhat biassed in favour of such indifference, which, notwithstanding, he contested so strongly on other occasions. He was much given to passing from one extreme to the other, not with an ill intention or against his own conviction, but because there was as yet nothing settled in his mind on the question concerned. He contented himself with whatever suited him for frustrating the opponent he had in mind, his aim being only to perplex philosophers, and show the weakness of our reason; and never, in my opinion, did either Arcesilaus or Carneades argue for and against with more eloquence and more wit. But, after all, one must not doubt for the sake of doubting: doubts must serve us as a gangway to the truth. That is what I often said to the late Abbé Foucher, a few specimens of whose work prove that he designed to do with regard to the Academicians what Lipsius and Scioppius had done for the Stoics, and M. Gassendi for Epicurus, and what M. Dacier has so well begun for Plato. It must not be possible for us to offer true philosophers such a reproach as that implied in the celebrated Casaubon's answer to those who, in showing him the hall of the Sorbonne, told him that debate had been carried on there for some centuries. What conclusions have been reached? he said to them.

354. M. Bayle goes on (): 'It is true that since the laws of motion were instituted in such forms as we see now in the world, it is an inevitable necessity that a hammer striking a nut should break it, and that a stone falling on a man's foot should cause some bruise or some derangement of its parts. But that is all that can follow the action of this stone upon the

human body. If you want it in addition to cause a feeling of pain, then one must assume the institution of a code other than that one which regulates the action and reaction of bodies one upon another; one must, I say, have recourse to the particular system of the laws of union between the soul and certain bodies. Now as this system is not of necessity connected with the other, the indifference of God does not cease in relation to the one immediately upon his choice of the other. He therefore combined these two systems with a complete freedom, like two things which did not follow naturally the one from the other. Thus it is by an arbitrary institution he has ordained that wounds in the body should cause pain in the soul which is united to this body. It therefore only rested with him to have chosen another system of union between soul and body: he was therefore able to choose one in accordance wherewith wounds only evoke the idea of the remedy and an intense but agreeable desire to apply it. He was able to arrange that all bodies which were on the point of breaking a man's head or piercing his heart should evoke a lively sense of danger, and that this sense should cause the body to remove itself promptly out of reach of the blow. All that would have come to pass without miracles, since there would have been general laws on this subject. The system which we know by experience teaches us that the determination of the movement of certain bodies changes in pursuance of our desires. It was therefore possible for a combination to be effected between our desires and the movement of certain bodies, whereby the nutritive juices were so modified that the good arrangement of our organs was never affected.'

355. It is evident that M. Bayle believes that everything accomplished through general laws is accomplished without miracles. But I have shown sufficiently that if the law is not founded on reasons and does not serve to explain the event through the nature of things, it can only be put into execution by a miracle. If, for example, God had ordained that bodies must

have a circular motion, he would have needed perpetual miracles, or the ministry of angels, to put this order into execution: for that is contrary to the nature of motion, whereby the body naturally abandons the circular line to continue in the tangent straight line if nothing holds it back. Therefore it is not enough for God to ordain simply that a wound should excite an agreeable sensation: natural means must be found for that purpose. The real means whereby God causes the soul to be conscious of what happens in the body have their origin in the nature of the soul, which represents the bodies, and is so made beforehand that the representations which are to spring up one from another within it, by a natural sequence of thoughts, correspond to the changes in the body.

356. The representation has a natural relation to that which is to be represented. If God should have the round shape of a body represented by the idea of a square, that would be an unsuitable representation: for there would be angles or projections in the representation, while all would be even and smooth in the original. The representation often suppresses something in the objects when it is imperfect; but it can add nothing: that would render it, not more than perfect, but false. Moreover, the suppression is never complete in our perceptions, and there is in the representation, confused as it is, more than we see there. Thus there is reason for supposing that the ideas of heat, cold, colours, etc. also only represent the small movements carried out in the organs, when one is conscious of these qualities, although the multiplicity and the diminutive character of these movements prevents their clear representation. Almost in the same way it happens that we do not distinguish the blue and the yellow which play their part in the representation as well as in the composition of the green, when the microscope shows that what appears to be green is composed of yellow and blue parts.

357. It is true that the same thing may be represented in different ways; but there must always be an exact relation between the representation and the thing, and consequently between the different representations of one and the same thing. The projections in perspective of the conic sections of the circle show that one and the same circle may be represented by an ellipse, a parabola and a hyperbola, and even by another circle, a straight line and a point. Nothing appears so different nor so dissimilar as these figures; and yet there is an exact relation between each point and every other point. Thus one must allow that each soul represents the universe to itself according to its point of view, and through a relation which is peculiar to it; but a perfect harmony always subsists therein. God, if he wished to effect representation of the dissolution of continuity of the body by an agreeable sensation in the soul, would not have neglected to ensure that this very dissolution should serve some perfection in the body, by giving it some new relief, as when one is freed of some burden or loosed from some bond. But organic bodies of such kinds, although possible, do not exist upon our globe, which doubtless lacks innumerable inventions that God may have put to use elsewhere. Nevertheless it is enough that, due allowance being made for the place our world holds in the universe, nothing can be done for it better than what God does. He makes the best possible use of the laws of nature which he has established and (as M. Regis also acknowledged in the same passage) ‘the laws that God has established in nature are the most excellent it is possible to conceive’.

358. I will add to that the remark from the *Journal des Savants* of the 16th March 1705, which M. Bayle has inserted in chapter 162 of the *Reply to the Questions of a Provincial* (vol. III,). The matter in question is the extract from a very ingenious modern book on the Origin of Evil, to which I have already referred here. It is stated: ‘that the general solution in respect of physical evil which this book gives is that the universe must be regarded

as a work composed of various pieces which form a whole; that, according to the laws established in nature, some parts cannot be better unless others become worse, whence would result a system less perfect as a whole. This principle', the writer goes on, 'is good; but if nothing is added to it, it does not appear sufficient. Why has God established laws that give rise to so many difficulties? philosophers who are somewhat precise will say. Could he not have established others of a kind not subject to any defects? And to cut the matter short, how comes it that he has prescribed laws for himself? Why does he not act without general laws, in accordance with all his power and all his goodness? The writer has not carried the difficulty as far as that. By disentangling his ideas one might indeed possibly find means of solving the difficulty, but there is no development of the subject in his work.'

359. I suppose that the gifted author of this extract, when he thought the difficulty could be solved, had in mind something akin to my principles on this matter. If he had vouchsafed to declare himself in this passage, he would to all appearance have replied, like M. Regis, that the laws God established were the most excellent that could be established. He would have acknowledged, at the same time, that God could not have refrained from establishing laws and following rules, because laws and rules are what makes order and beauty; that to act without rules would be to act without reason; and that because God *called into action all his goodness* the exercise of his omnipotence was consistent with the laws of wisdom, to secure as much good as was possible of attainment. Finally, he would have said, the existence of certain particular disadvantages which strike us is a sure indication that the best plan did not permit of their avoidance, and that they assist in the achievement of the total good, an argument wherewith M. Bayle in more than one place expresses agreement.

360. Now that I have proved sufficiently that everything comes to pass according to determinate reasons, there cannot be any more difficulty over

these principles of God's foreknowledge. Although these determinations do not compel, they cannot but be certain, and they foreshadow what shall happen. It is true that God sees all at once the whole sequence of this universe, when he chooses it, and that thus he has no need of the connexion of effects and causes in order to foresee these effects. But since his wisdom causes him to choose a sequence in perfect connexion, he cannot but see one part of the sequence in the other. It is one of the rules of my system of general harmony, *that the present is big with the future*, and that he who sees all sees in that which is that which shall be. What is more, I have proved conclusively that God sees in each portion of the universe the whole universe, owing to the perfect connexion of things. He is infinitely more discerning than Pythagoras, who judged the height of Hercules by the size of his footprint. There must therefore be no doubt that effects follow their causes determinately, in spite of contingency and even of freedom, which nevertheless exist together with certainty or determination.

361. Durand de Saint-Pourçain, among others, has indicated this clearly in saying that contingent futurities are seen determinately in their causes, and that God, who knows all, seeing all that shall have power to tempt or repel the will, will see therein the course it shall take. I could cite many other authors who have said the same thing, and reason does not allow the possibility of thinking otherwise. M. Jacquelot implies also (*Conformity of Faith with Reason*, *et seqq.*), as M. Bayle observes (*Reply to the Questions of a Provincial*, vol. III, ch. 142,), that the dispositions of the human heart and those of circumstances acquaint God unerringly with the choice that man shall make. M. Bayle adds that some Molinists say the same, and refers us to those who are quoted in the *Suavis Concordia* of Pierre de S. Joseph, the Feuillant (p, 580).

362. Those who have confused this determination with necessity have fabricated monsters in order to fight them. To avoid a reasonable thing

which they had disguised under a hideous shape, they have fallen into great absurdities. For fear of being obliged to admit an imaginary necessity, or at least one different from that in question, they have admitted something which happens without the existence of any cause or reason for it. This amounts to the same as the absurd deviation of atoms, which according to Epicurus happened without any cause. Cicero, in his book on Divination, saw clearly that if the cause could produce an effect towards which it was entirely indifferent there would be a true chance, a genuine luck, an actual fortuitous case, that is, one which would be so not merely in relation to us and our ignorance, according to which one may say:

Sed Te

Nos facimus, Fortuna, Deam, caeloque locamus,

but even in relation to God and to the nature of things. Consequently it would be impossible to foresee events by judging of the future by the past. He adds fittingly in the same passage: 'Qui potest provideri, quicquam futurum esse, quod neque causam habet ullam, neque notam cur futurum sit?' and soon after: 'Nihil est tam contrarium rationi et constantiae, quam fortuna; ut mihi ne in Deum quidem cadere videatur, ut sciat quid casu et fortuito futurum sit. Si enim scit, certe illud eveniet: sin certe eveniet, nulla fortuna est.' If the future is certain, there is no such thing as luck. But he wrongly adds: 'Est autum fortuna; rerum igitur fortuitarum nulla praesensio est.' There is luck, therefore future events cannot be foreseen. He ought rather to have concluded that, events being predetermined and foreseen, there is no luck. But he was then speaking against the Stoics, in the character of an Academician.

363. The Stoics already derived from the decrees of God the prevision of events. For, as Cicero says in the same book: 'Sequitur porro nihil Deos ignorare, quod omnia ab iis sint constituta.' And, according to my system, God, having seen the possible world that he desired to create, foresaw

everything therein. Thus one may say that the *divine knowledge of vision differs from the knowledge of simple intelligence* only in that it adds to the latter the acquaintance with the actual decree to choose this sequence of things which simple intelligence had already presented, but only as possible; and this decree now makes the present universe.

364. Thus the Socinians cannot be excused for denying to God the certain knowledge of future events, and above all of the future resolves of a free creature. For even though they had supposed that there is a freedom of complete indifference, so that the will can choose without cause, and that thus this effect could not be seen in its cause (which is a great absurdity), they ought always to take into account that God was able to foresee this event in the idea of the possible world that he resolved to create. But the idea which they have of God is unworthy of the Author of things, and is not commensurate with the skill and wit which the writers of this party often display in certain particular discussions. The author of the *Reflexion on the Picture of Socinianism* was not altogether mistaken in saying that the God of the Socinians would be ignorant and powerless, like the God of Epicurus, every day confounded by events and living from one day to the next, if he only knows by conjecture what the will of men is to be.

365. The whole difficulty here has therefore only come from a wrong idea of contingency and of freedom, which was thought to have need of a complete indifference or equipoise, an imaginary thing, of which neither a notion nor an example exists, nor ever can exist. Apparently M. Descartes had been imbued with the idea in his youth, at the College of la Flèche. That caused him to say (part I of his *Principles*, art. 41): ‘Our thought is finite, and the knowledge and omnipotence of God, whereby he has not only known from all eternity everything that is, or that can be, but also has willed it, is infinite. Thus we have enough intelligence to recognize clearly and distinctly that this power and this knowledge are in God; but we have

not enough so to comprehend their extent that we can know how they leave the actions of men entirely free and indeterminate.' The continuation has already been quoted above. 'Entirely free', that is right; but one spoils everything by adding 'entirely indeterminate'. One has no need of infinite knowledge in order to see that the foreknowledge and the providence of God allow freedom to our actions, since God has foreseen those actions in his ideas, just as they are, that is, free. Laurentius Valla indeed, in his *Dialogue against Boethius* (which I will presently quote in epitome) ably undertakes to reconcile freedom with foreknowledge, but does not venture to hope that he can reconcile it with providence. Yet there is no more difficulty in the one than the other, because the decree to give existence to this action no more changes its nature than does one's mere consciousness thereof. But there is no knowledge, however infinite it be, which can reconcile the knowledge and providence of God with actions of an indeterminate cause, that is to say, with a chimerical and impossible being. The actions of the will are determined in two ways, by the foreknowledge or providence of God, and also by the dispositions of the particular immediate cause, which lie in the inclinations of the soul. M. Descartes followed the Thomists on this point; but he wrote with his usual circumspection, so as not to come into conflict with some other theologians.

366. M. Bayle relates (*Reply to the Questions of a Provincial*, vol. III, ch. 142,) that Father Gibieuf of the Oratory published a Latin treatise on the freedom of God and of the creature, in the year 1639; that he was met with protests, and was shown a collection of seventy contradictions taken from the first book of his work; and that, twenty years after, Father Annat, Confessor to the King of France, reproached him in his book *De Incoacta Libertate* (ed. Rome, 1654, in 4to.), for the silence he still maintained. Who would not think (adds M. Bayle), after the uproar of the *de Auxiliis* Congregations, that the Thomists taught things touching the nature of free

will which were entirely opposed to the opinion of the Jesuits? When, however, one considers the passages that Father Annat quoted from the works of the Thomists (in a pamphlet entitled: *Jansenius a Thomistis, gratiae per se ipsam efficacis defensoribus, condemnatus*, printed in Paris in the year 1654 in 4to.) one can in reality only see verbal controversies between the two sects. The grace efficacious of itself, according to the one side, leaves to free will quite as much power of resistance as the congruent grace of the others. M. Bayle thinks one can say almost as much of Jansenius himself. He was (so he says) an able man, of a methodical mind and of great assiduity. He worked for twenty-two years at his *Augustinus*. One of his aims was to refute the Jesuits on the dogma of free will; yet no decision has yet been reached as to whether he rejects or adopts freedom of indifference. From his work innumerable passages are quoted for and against this opinion, as Father Annat has himself shown in the work that has just been mentioned, *De Incoacta Libertate*. So easy is it to render this subject obscure, as M. Bayle says at the conclusion of this discourse. As for Father Gibieuf, it must be admitted that he often alters the meaning of his terms, and that consequently he does not answer the question in the main, albeit he often writes with good sense.

367. Indeed, confusion springs, more often than not, from ambiguity in terms, and from one's failure to take trouble over gaining clear ideas about them. That gives rise to these eternal, and usually mistaken, contentions on necessity and contingency, on the possible and the impossible. But provided that it is understood that necessity and possibility, taken metaphysically and strictly, depend solely upon this question, whether the object in itself or that which is opposed to it implies contradiction or not; and that one takes into account that contingency is consistent with the inclinations, or reasons which contribute towards causing determination by the will; provided also that one knows how to distinguish clearly between necessity and

determination or certainty, between metaphysical necessity, which admits of no choice, presenting only one single object as possible, and moral necessity, which constrains the wisest to choose the best; finally, provided that one is rid of the chimera of complete indifference, which can only be found in the books of philosophers, and on paper (for they cannot even conceive the notion in their heads, or prove its reality by an example in things) one will easily escape from a labyrinth whose unhappy Daedalus was the human mind. That labyrinth has caused infinite confusion, as much with the ancients as with those of later times, even so far as to lead men into the absurd error of the Lazy Sophism, which closely resembles fate after the Turkish fashion. I do not wonder if in reality the Thomists and the Jesuits, and even the Molinists and the Jansenists, agree together on this matter more than is supposed. A Thomist and even a wise Jansenist will content himself with certain determination, without going on to necessity: and if someone goes so far, the error mayhap will lie only in the word. A wise Molinist will be content with an indifference opposed to necessity, but such as shall not exclude prevalent inclinations.

368. These difficulties, however, have greatly impressed M. Bayle, who was more inclined to dwell on them than to solve them, although he might perhaps have had better success than anyone if he had thought fit to turn his mind in that direction. Here is what he says of them in his *Dictionary*, art. ‘Jansenius’, lit. G,: ‘Someone has said that the subject of Grace is an ocean which has neither shore nor bottom. Perhaps he would have spoken more correctly if he had compared it to the Strait of Messina, where one is always in danger of striking one reef while endeavouring to avoid another.

Dextrum Scylla latus, laevum implacata Charybdis
Obsidet.

Everything comes back in the end to this: Did Adam sin freely? If you answer yes, then you will be told, his fall was not foreseen. If you answer

no, then you will be told, he is not guilty. You may write a hundred volumes against the one or the other of these conclusions, and yet you will confess, either that the infallible prevision of a contingent event is a mystery impossible to conceive, or that the way in which a creature which acts without freedom sins nevertheless is altogether incomprehensible.'

369. Either I am greatly mistaken or these two alleged incomprehensibilities are ended altogether by my solutions. Would to God it were as easy to answer the question how to cure fevers, and how to avoid the perils of two chronic sicknesses that may originate, the one from not curing the fever, the other from curing it wrongly. When one asserts that a free event cannot be foreseen, one is confusing freedom with indetermination, or with indifference that is complete and in equipoise; and when one maintains that the lack of freedom would prevent man from being guilty, one means a freedom exempt, not from determination or from certainty, but from necessity and from constraint. This shows that the dilemma is not well expressed, and that there is a wide passage between the two perilous reefs. One will reply, therefore, that Adam sinned freely, and that God saw him sinning in the possible state of Adam, which became actual in accordance with the decree of the divine permission. It is true that Adam was determined to sin in consequence of certain prevailing inclinations: but this determination destroys neither contingency nor freedom. Moreover, the certain determination to sin which exists in man does not deprive him of the power to avoid sinning (speaking generally) or, since he does sin, prevent him from being guilty and deserving punishment. This is more especially so since the punishment may be of service to him or others, to contribute towards determining them another time not to sin. There is besides punitive justice, which goes beyond compensation and amendment, and wherein also there is nothing liable to be shaken by the certain determination of the contingent resolutions of the will. It may be

said, on the contrary, that the penalties and rewards would be to some extent unavailing, and would fail in one of their aims, that of amendment, if they could not contribute towards determining the will to do better another time.

370. M. Bayle continues: ‘Where freedom is concerned there are only two courses to take: one is to say that all the causes distinct from the soul, and co-operating with it, leave it the power to act or not to act; the other is to say that they so determine it to act that it cannot forbear to do so. The first course is that taken by the Molinists, the other is that of the Thomists and Jansenists and the Protestants of the Geneva Confession. Yet the Thomists have clamorously maintained that they were not Jansenists; and the latter have maintained with equal warmth that where freedom was concerned they were not Calvinists. On the other hand, the Molinists have maintained that St. Augustine did not teach Jansenism. Thus the one side not wishing to admit that they were in conformity with people who were considered heretics, and the other side not wishing to admit that they were in opposition to a learned saint whose opinions were always considered orthodox, have both performed a hundred feats of contortion, etc.’

371. The two courses which M. Bayle distinguishes here do not exclude a third course, according to which the determination of the soul does not come solely from the co-operation of all the causes distinct from the soul, but also from the state of the soul itself and its inclinations which mingle with the impressions of the senses, strengthening or weakening them. Now all the internal and external causes taken together bring it about that the soul is determined certainly, but not of necessity: for no contradiction would be implied if the soul were to be determined differently, it being possible for the will to be inclined, but not possible for it to be compelled by necessity. I will not venture upon a discussion of the difference existing between the Jansenists and the Reformed on this matter. They are not perhaps always fully in accord with themselves as regards things, or as regards expressions,

on a matter where one often loses one's way in bewildering subtleties. Father Theophile Raynaud, in his book entitled *Calvinismus Religio Bestiarum*, wished to strike at the Dominicans, without naming them. On the other hand, those who professed to be followers of St. Augustine reproached the Molinists with Pelagianism or at the least semi-Pelagianism. Things were carried to excess at times by both sides, whether in their defence of a vague indifference and the granting of too much to man, or in their teaching *determinationem ad unum secundum qualitatem actus licet non quoad ejus substantiam*, that is to say, a determination to evil in the non-regenerate, as if they did nothing but sin. After all, I think one must not reproach any but the adherents of Hobbes and Spinoza with destroying freedom and contingency; for they think that that which happens is alone possible, and must happen by a brute geometrical necessity. Hobbes made everything material and subjected it to mathematical laws alone; Spinoza also divested God of intelligence and choice, leaving him a blind power, whence all emanates of necessity. The theologians of the two Protestant parties are equally zealous in refuting an unendurable necessity. Although those who follow the Synod of Dordrecht teach sometimes that it suffices for freedom to be exempt from constraint, it seems that the necessity they leave in it is only hypothetical, or rather that which is more appropriately termed certainty and infallibility. Thus it results that very often the difficulties only lie in the terms. I say as much with regard to the Jansenists, although I do not wish to make excuse for those people in everything.

372. With the Hebrew Cabalists, *Malcuth* or the Kingdom, the last of the Sephiroth, signified that God controls everything irresistibly, but gently and without violence, so that man thinks he is following his own will while he carries out God's. They said that Adam's sin had been *truncatio Malcuth a caeteris plantis*, that is to say, that Adam had cut back the last of the Sephiroth, by making a dominion for himself within God's dominion, and

by assuming for himself a freedom independent of God, but that his fall had taught him that he could not subsist of himself, and that men must needs be redeemed by the Messiah. This doctrine may receive a good interpretation. But Spinoza, who was versed in the Cabala of the writers of his race, and who says (*Tractatus Politicus*, c. 2, n. 6) that men, conceiving of freedom as they do, establish a dominion within God's dominion, has gone too far. The dominion of God is with Spinoza nothing but the dominion of necessity, and of a blind necessity (as with Strato), whereby everything emanates from the divine nature, while no choice is left to God, and man's choice does not exempt him from necessity. He adds that men, in order to establish what is termed *Imperium in Imperio*, supposed that their soul was a direct creation of God, something which could not be produced by natural causes, furthermore that it had an absolute power of determination, a state of things contrary to experience. Spinoza is right in opposing an absolute power of determination, that is, one without any grounds; it does not belong even to God. But he is wrong in thinking that a soul, that a simple substance, can be produced naturally. It seems, indeed, that the soul to him was only a transient modification; and when he pretends to make it lasting, and even perpetual, he substitutes for it the idea of the body, which is purely a notion and not a real and actual thing.

373. The story M. Bayle relates of Johan Bredenburg, a citizen of Rotterdam (*Dictionary*, art. 'Spinoza', lit. H,) is curious. He published a book against Spinoza, entitled: *Enervatio Tractatus Theologico-politici, una cum demonstratione geometrico ordine disposita, Naturam non esse Deum, cujus effati contrario praedictus Tractatus unice innititur*. One was surprised to see that a man who did not follow the profession of letters, and who had but slight education (having written his book in Flemish, and had it translated into Latin), had been able to penetrate with such subtlety all the principles of Spinoza, and succeed in overthrowing them, after having

reduced them by a candid analysis to a state wherein they could appear in their full force. I have been told (adds M. Bayle) that this writer after copious reflexion upon his answer, and upon the principle of his opponent, finally found that this principle could be reduced to the form of a demonstration. He undertook therefore to prove that there is no cause of all things other than a nature which exists necessarily, and which acts according to an immutable, inevitable and irrevocable necessity. He examined the whole system of the geometricians, and after having constructed his demonstration he scrutinized it from every imaginable angle, he endeavoured to find its weak spot and was never able to discover any means of destroying it, or even of weakening it. That caused him real distress: he groaned over it and begged the most talented of his friends to help him in searching out the defects of this demonstration. For all that, he was not well pleased that copies of the book were made. Franz Cuper, a Socinian (who had written *Arcana Atheismi Revelata* against Spinoza, Rotterdam, 1676, in 4to.), having obtained a copy, published it just as it was, that is, in Flemish, with some reflexions, and accused the author of being an atheist. The accused made his defence in the same tongue. Orobio, a very able Jewish physician (that one who was refuted by M. Limbourg, and who replied, so I have heard say, in a work posthumously circulated, but unpublished), brought out a book opposing Bredenburg's demonstration, entitled: *Certamen Philosophicum Propugnatae Veritatis Divinae ac Naturalis, adversus J.B. principia, Amsterdam*, 1684. M. Aubert de Versé also wrote in opposition to him the same year under the name of Latinus Serbattus Sartensis. Bredenburg protested that he was convinced of free will and of religion, and that he wished he might be shown a possibility of refuting his own demonstration.

374. I would desire to see this alleged demonstration, and to know whether it tended to prove that primitive Nature, which produces all, acts

without choice and without knowledge. In this case, I admit that his proof was Spinozistic and dangerous. But if he meant perhaps that the divine nature is determined toward that which it produces, by its choice and through the motive of the best, there was no need for him to grieve about this so-called immutable, inevitable, irrevocable necessity. It is only moral, it is a happy necessity; and instead of destroying religion it shows divine perfection to the best advantage.

375. I take this opportunity to add that M. Bayle quotes () the opinion of those who believe that the book entitled *Lucii Antistii Constantis de Jure Ecclesiasticorum Liber Singularis*, published in 1665, is by Spinoza. But I have reason for doubting this, despite that M. Colerus, who has passed on to me an account he wrote of the life of that famous Jew, is also of that opinion. The initial letters L.A.C. lead me to believe that the author of this book was M. de la Cour or Van den Hoof, famous for works on the *Interest of Holland, Political Equipoise*, and numerous other books that he published (some of them under the signature V.D.H.) attacking the power of the Governor of Holland, which was at that time considered a danger to the Republic; for the memory of Prince William the Second's attempt upon the city of Amsterdam was still quite fresh. Most of the ecclesiastics of Holland were on the side of this prince's son, who was then a minor, and they suspected M. de Witt and what was called the Lowenstein faction of favouring the Arminians, the Cartesians, and other sects that were feared still more, endeavouring to rouse the populace against them, and not without success, as the event proved. It was thus very natural that M. de la Cour should publish this book. It is true that people seldom keep to the happy mean in works published to further party interests. I will say in passing that a French version of the *Interest of Holland* by M. de la Cour has just been published, under the deceptive title of *Mémoires de M. le Grand-Pensionnaire de Witt*; as if the thoughts of a private individual, who

was, to be sure, of de Witt's party, and a man of talent, but who had not enough acquaintance with public affairs or enough ability to write as that great Minister of State might have written, could pass for the production of one of the first men of his time.

376. I saw M. de la Cour as well as Spinoza on my return from France by way of England and Holland, and I learnt from them a few good anecdotes on the affairs of that time. M. Bayle says,, that Spinoza studied Latin under a physician named Franz van den Ende. He tells at the same time, on the authority of Sebastian Kortholt (who refers to it in the preface to the second edition of the book by his late father, *De Tribus Impostoribus, Herberto L. B. de Cherbury, Hobbio et Spinoza*) that a girl instructed Spinoza in Latin, and that she afterwards married M. Kerkering, who was her pupil at the same time as Spinoza. In connexion with that I note that this young lady was a daughter of M. van den Ende, and that she assisted her father in the work of teaching. Van den Ende, who was also called A. Finibus, later went to Paris, and there kept a boarding-school in the Faubourg St. Antoine. He was considered excellent as an instructor, and he told me, when I called upon him there, that he would wager that his audiences would always pay attention to his words. He had with him as well at that time a young girl who also spoke Latin, and worked upon geometrical demonstrations. He had insinuated himself into M. Arnauld's good graces, and the Jesuits began to be jealous of his reputation. But he disappeared shortly afterwards, having been mixed up in the Chevalier de Rohan's conspiracy.

377. I think I have sufficiently proved that neither the foreknowledge nor the providence of God can impair either his justice or his goodness, or our freedom. There remains only the difficulty arising from God's co-operation with the actions of the creature, which seems to concern more closely both his goodness, in relation to our evil actions, and our freedom, in relation to

good actions as well as to others. M. Bayle has brought out this also with his usual acuteness. I will endeavour to throw light upon the difficulties he puts forward, and then I shall be in a position to conclude this work. I have already proved that the co-operation of God consists in giving us continually all that is real in us and in our actions, in so far as it involves perfection; but that all that is limited and imperfect therein is a consequence of the previous limitations which are originally in the creature. Since, moreover, every action of the creature is a change of its modifications, it is obvious that action arises in the creature in relation to the limitations or negations which it has within itself, and which are diversified by this change.

378. I have already pointed out more than once in this work that evil is a consequence of privation, and I think that I have explained that intelligibly enough. St. Augustine has already put forward this idea, and St. Basil said something of the same kind in his *Hexaëmeron*, Homil. 2, 'that vice is not a living and animate substance, but an affection of the soul contrary to virtue, which arises from one's abandoning the good; and there is therefore no need to look for an original evil'. M. Bayle, quoting this passage in his *Dictionary* (art. 'Paulicians', lit. D,) commends a remark by Herr Pfanner (whom he calls a German theologian, but he is a jurist by profession, Counsellor to the Dukes of Saxony), who censures St. Basil for not being willing to admit that God is the author of physical evil. Doubtless God is its author, when the moral evil is assumed to be already in existence; but speaking generally, one might assert that God permitted physical evil by implication, in permitting moral evil which is its source. It appears that the Stoics knew also how slender is the entity of evil. These words of Epictetus are an indication: 'Sicut aberrandi causa meta non ponitur, sic nec natura mali in mundo existit.'

379. There was therefore no need to have recourse to a principle of evil, as St. Basil aptly observes. Nor is it necessary either to seek the origin of evil in matter. Those who believed that there was a chaos before God laid his hand upon it sought therein the source of disorder. It was an opinion which Plato introduced into his *Timaeus*. Aristotle found fault with him for that (in his third book on Heaven, ch. 2) because, according to this doctrine, disorder would be original and natural, and order would have been introduced against nature. This Anaxagoras avoided by making matter remain at rest until it was stirred by God; and Aristotle in the same passage commends him for it. According to Plutarch (*De Iside et Osiride*, and *Tr. de Animae Procreatione ex Timaeo*) Plato recognized in matter a certain maleficent soul or force, rebellious against God: it was an actual blemish, an obstacle to God's plans. The Stoics also believed that matter was the source of defects, as Justus Lipsius showed in the first book of the Physiology of the Stoics.

380. Aristotle was right in rejecting chaos: but it is not always easy to disentangle the conceptions of Plato, and such a task would be still less easy in respect of some ancient authors whose works are lost. Kepler, one of the most excellent of modern mathematicians, recognized a species of imperfection in matter, even when there is no irregular motion: he calls it its 'natural inertia', which gives it a resistance to motion, whereby a greater mass receives less speed from one and the same force. There is soundness in this observation, and I have used it to advantage in this work, in order to have a comparison such as should illustrate how the original imperfection of the creatures sets bounds to the action of the Creator, which tends towards good. But as matter is itself of God's creation, it only furnishes a comparison and an example, and cannot be the very source of evil and of imperfection. I have already shown that this source lies in the forms or ideas of the possibles, for it must be eternal, and matter is not so. Now since God

made all positive reality that is not eternal, he would have made the source of evil, if that did not rather lie in the possibility of things or forms, that which alone God did not make, since he is not the author of his own understanding.

381. Yet even though the source of evil lies in the possible forms, anterior to the acts of God's will, it is nevertheless true that God co-operates in evil in the actual performance of introducing these forms into matter: and this is what causes the difficulty in question here. Durand de Saint-Pourçain, Cardinal Aureolus, Nicolas Taurel, Father Louis de Dole, M. Bernier and some others, speaking of this co-operation, would have it only general, for fear of impairing the freedom of man and the holiness of God. They seem to maintain that God, having given to creatures the power to act, contents himself with conserving this power. On the other hand, M. Bayle, according to some modern writers, carries the cooperation of God too far: he seems to fear lest the creature be not sufficiently dependent upon God. He goes so far as to deny action to creatures; he does not even acknowledge any real distinction between accident and substance.

382. He places great reliance especially on that doctrine accepted of the Schoolmen, that conservation is a continued creation. The conclusion to be drawn from this doctrine would seem to be that the creature never exists, that it is ever newborn and ever dying, like time, movement and other transient beings. Plato believed this of material and tangible things, saying that they are in a perpetual flux, *semper fluunt, nunquam sunt*. But of immaterial substances he judged quite differently, regarding them alone as real: nor was he in that altogether mistaken. Yet continued creation applies to all creatures without distinction. Sundry good philosophers have been opposed to this dogma, and M. Bayle tells that David de Rodon, a philosopher renowned among those of the French who have adhered to Geneva, deliberately refuted it. The Arminians also do not approve of it;

they are not much in favour of these metaphysical subtleties. I will say nothing of the Socinians, who relish them even less.

383. For a proper enquiry as to *whether conservation is a continued creation,* it would be necessary to consider the reasons whereon this dogma is founded. The Cartesians, after the example of their master, employ in order to prove it a principle which is not conclusive enough. They say that 'the moments of time having no necessary connexion with one another, it does not follow that because I am at this moment I shall exist at the moment which shall follow, if the same cause which gives me being for this moment does not also give it to me for the instant following.' The author of the *Reflexion on the Picture of Socinianism* has made use of this argument, and M. Bayle (perhaps the author of this same *Reflexion*) quotes it (*Reply to the Questions of a Provincial*, vol. III, ch. 141,). One may answer that in fact it does not follow *of necessity* that, because I am, I shall be; but this follows *naturally*, nevertheless, that is, of itself, *per se*, if nothing prevents it. It is the distinction that can be drawn between the essential and the natural. For the same movement endures naturally unless some new cause prevents it or changes it, because the reason which makes it cease at this instant, if it is no new reason, would have already made it cease sooner.

384. The late Herr Erhard Weigel, a celebrated mathematician and philosopher at Jena, well known for his *Analysis Euclidea*, his mathematical philosophy, some neat mechanical inventions, and finally the trouble he took to induce the Protestant princes of the Empire to undertake the last reform of the Almanac, whose success, notwithstanding, he did not witness; Herr Weigel, I say, communicated to his friends a certain demonstration of the existence of God, which indeed amounted to this idea of continued creation. As he was wont to draw parallels between reckoning and reasoning — witness his Arithmetical Ethics (*rechenschaftliche Sittenlehre*) — he said that the foundation of the demonstration was this beginning of

the Pythagorean Table, *once one is one*. These repeated unities were the moments of the existence of things, each one of them depending upon God, who resuscitates, as it were, all things outside himself at each moment: falling away as they do at each moment, they must ever have one who shall resuscitate them, and that cannot be any other than God. But there would be need of a more exact proof if that is to be called a demonstration. It would be necessary to prove that the creature always emerges from nothingness and relapses thither forthwith. In particular it must be shown that the privilege of enduring more than a moment by its nature belongs to the necessary being alone. The difficulties on the composition of the *continuum* enter also into this matter. This dogma appears to resolve time into moments, whereas others regard moments and points as mere modalities of the *continuum*, that is, as extremities of the parts that can be assigned to it, and not as constituent parts. But this is not the place for entering into that labyrinth.

385. What can be said for certain on the present subject is that the creature depends continually upon divine operation, and that it depends upon that no less after the time of its beginning than when it first begins. This dependence implies that it would not continue to exist if God did not continue to act; in short, that this action of God is free. For if it were a necessary emanation, like that of the properties of the circle, which issue from its essence, it must then be said that God in the beginning produced the creature by necessity; or else it must be shown how, in creating it once, he imposed upon himself the necessity of conserving it. Now there is no reason why this conserving action should not be called production, and even creation, if one will: for the dependence being as great afterwards as at the beginning, the extrinsic designation of being new or not does not change the nature of that action.

386. Let us then admit in such a sense that conservation is a continued creation, and let us see what M. Bayle seems to infer thence () after the author of the *Reflexion on the Picture of Socinianism*, in opposition to M. Jurieu. ‘It seems to me’, this writer says, ‘that one must conclude that God does all, and that in all creation there are no first or second or even occasional causes, as can be easily proved. At this moment when I speak, I am such as I am, with all my circumstances, with such thought, such action, whether I sit or stand, that if God creates me in this moment such as I am, as one must of necessity say in this system, he creates me with such thought, such action, such movement and such determination. One cannot say that God creates me in the first place, and that once I am created he produces with me my movements and my determinations. That is indefensible for two reasons. The first is, that when God creates me or conserves me at this instant, he does not conserve me as a being without form, like a species, or another of the Universals of Logic. I am an individual; he creates me and conserves me as such, and as being all that I am in this instant, with all my attendant circumstances. The second reason is that if God creates me in this instant, and one says that afterwards he produces with me my actions, it will be necessary to imagine another instant for action: for before acting one must exist. Now that would be two instants where we only assume one. It is therefore certain in this hypothesis that creatures have neither more connexion nor more relation with their actions than they had with their production at the first moment of the first creation.’ The author of this *Reflexion* draws thence very harsh conclusions which one can picture to oneself; and he testifies at the end that one would be deeply indebted to any man that should teach those who approve this system how to extricate themselves from these frightful absurdities.

387. M. Bayle carries this still further. ‘You know’, he says (), ‘that it is demonstrated in the Scholastic writings’ (he cites Arriaga, *Dis*, Phys. sect. 6

et praesertim, sub-sect. 3) ‘that the creature cannot be either the total cause or the partial cause of its conservation: for if it were, it would exist before existing, which is contradictory. You know that the argument proceeds like this: that which conserves itself acts; now that which acts exists, and nothing can act before it has attained complete existence; therefore, if a creature conserved itself, it would act before being. This argument is not founded upon probabilities, but upon the first principles of Metaphysics, *non entis nulla sunt accidentia, operari sequitur esse*, axioms as clear as daylight. Let us go further. If creatures co-operated with God (here is meant an active cooperation, and not co-operation by a passive instrument) to conserve themselves they would act before being: that has been demonstrated. Now if they co-operated with God for the production of any other thing, they would also act before being; it is therefore as impossible for them to co-operate with God for the production of any other thing (such as local movement, an affirmation, volition, entities actually distinct from their substance, so it is asserted) as for their own conservation. Since their conservation is a continued creation, and since all human creatures in the world must confess that they cannot co-operate with God at the first moment of their existence, either to produce themselves or to give themselves any modality, since that would be to act before being (observe that Thomas Aquinas and sundry other Schoolmen teach that if the angels had sinned at the first moment of their creation God would be the author of the sin: see the Feuillant Pierre de St. Joseph,, *et seqq*. of the *Suavis Concordia Humanae Libertatis*; it is a sign that they acknowledge that at the first instant the creature cannot act in anything whatsoever), it follows manifestly that they cannot co-operate with God in any one of the subsequent moments, either to produce themselves or to produce any other thing. If they could co-operate therein at the second moment of their

existence, nothing would prevent their being able to cooperate at the first moment.'

388. This is the way it will be necessary to answer these arguments. Let us assume that the creature is produced anew at each instant; let us grant also that the instant excludes all priority of time, being indivisible; but let us point out that it does not exclude priority of nature, or what is called anteriority *in signo rationis,* and that this is sufficient. The production, or action whereby God produces, is anterior by nature to the existence of the creature that is produced; the creature taken in itself, with its nature and its necessary properties, is anterior to its accidental affections and to its actions; and yet all these things are in being in the same moment. God produces the creature in conformity with the exigency of the preceding instants, according to the laws of his wisdom; and the creature operates in conformity with that nature which God conveys to it in creating it always. The limitations and imperfections arise therein through the nature of the subject, which sets bounds to God's production; this is the consequence of the original imperfection of creatures. Vice and crime, on the other hand, arise there through the free inward operation of the creature, in so far as this can occur within the instant, repetition afterwards rendering it discernible.

389. This anteriority of nature is a commonplace in philosophy: thus one says that the decrees of God have an order among themselves. When one ascribes to God (and rightly so) understanding of the arguments and conclusions of creatures, in such sort that all their demonstrations and syllogisms are known to him, and are found in him in a transcendent way, one sees that there is in the propositions or truths a natural order; but there is no order of time or interval, to cause him to advance in knowledge and pass from the premisses to the conclusion.

390. I find in the arguments that have just been quoted nothing which these reflexions fail to satisfy. When God produces the thing he produces it

as an individual and not as a universal of logic (I admit); but he produces its essence before its accidents, its nature before its operations, following the priority of their nature, and *in signo anteriore rationis*. Thus one sees how the creature can be the true cause of the sin, while conservation by God does not prevent the sin; God disposes in accordance with the preceding state of the same creature, in order to follow the laws of his wisdom notwithstanding the sin, which in the first place will be produced by the creature. But it is true that God would not in the beginning have created the soul in a state wherein it would have sinned from the first moment, as the Schoolmen have justly observed: for there is nothing in the laws of his wisdom that could have induced him so to do.

391. This law of wisdom brings it about also that God reproduces the same substance, the same soul. Such was the answer that could have been given by the Abbé whom M. Bayle introduces in his *Dictionary* (art. 'Pyrrhon.' lit. B,). This wisdom effects the connexion of things. I concede therefore that the creature does not co-operate with God to conserve himself (in the sense in which I have just explained conservation). But I see nothing to prevent the creature's co-operation with God for the production of any other thing: and especially might this concern its inward operation, as in the case of a thought or a volition, things really distinct from the substance.

392. But there I am once more at grips with M. Bayle. He maintains that there are no such accidents distinct from the substance. 'The reasons', he says, 'which our modern philosophers have employed to demonstrate that the accidents are not beings in reality distinct from the substance are not mere difficulties; they are arguments which overwhelm one, and which cannot be refuted. Take the trouble', he adds, 'to look for them in the writings of Father Maignan, or Father Malebranche or M. Calli' (Professor of Philosophy at Caen) 'or in the *Accidentia profligata* of Father Saguens,

disciple of Father Maignan, the extract from which is to be found in the *Nouvelles de la République des Lettres*, June 1702. Or if you wish one author only to suffice you, choose Dom François Lami, a Benedictine monk, and one of the strongest Cartesians to be found in France. You will find among his *Philosophical Letters*, printed at Trévoux in 1703, that one wherein by the geometricians' method he demonstrates "that God is the sole true cause of all that which is real." I would wish to see all these books; and as for this last proposition, it may be true in a very good sense: God is the one principal cause of pure and absolute realities, or of perfections. *Causae secundae agunt in virtute primae.* But when one comprises limitations and privations under the term realities one may say that the second causes co-operate in the production of that which is limited; otherwise God would be the cause of sin, and even the sole cause.

393. It is well to beware, moreover, lest in confusing substances with accidents, in depriving created substances of action, one fall into Spinozism, which is an exaggerated Cartesianism. That which does not act does not merit the name of substance. If the accidents are not distinct from the substances; if the created substance is a successive being, like movement; if it does not endure beyond a moment, and does not remain the same (during some stated portion of time) any more than its accidents; if it does not operate any more than a mathematical figure or a number: why shall one not say, with Spinoza, that God is the only substance, and that creatures are only accidents or modifications? Hitherto it has been supposed that the substance remains, and that the accidents change; and I think one ought still to abide by this ancient doctrine, for the arguments I remember having read do not prove the contrary, and prove more than is needed.

394. 'One of the absurdities', says M. Bayle (), 'that arise from the so-called distinction which is alleged to exist between substances and their accidents is that creatures, if they produce the accidents, would possess a

power of creation and annihilation. Accordingly one could not perform the slightest action without creating an innumerable number of real beings, and without reducing to nothingness an endless multitude of them. Merely by moving the tongue to cry out or to eat, one creates as many accidents as there are movements of the parts of the tongue, and one destroys as many accidents as there are parts of that which one eats, which lose their form, which become chyle, blood, etc.' This argument is only a kind of bugbear. What harm would be done, supposing that an infinity of movements, an infinity of figures spring up and disappear at every moment in the universe, and even in each part of the universe? It can be demonstrated, moreover, that that must be so.

395. As for the so-called creation of the accidents, who does not see that one needs no creative power in order to change place or shape, to form a square or a column, or some other parade-ground figure, by the movement of the soldiers who are drilling; or again to fashion a statue by removing a few pieces from a block of marble; or to make some figure in relief, by changing, decreasing or increasing a piece of wax? The production of modifications has never been called *creation*, and it is an abuse of terms to scare the world thus. God produces substances from nothing, and the substances produce accidents by the changes of their limits.

396. As for the souls or substantial forms, M. Bayle is right in adding: 'that there is nothing more inconvenient for those who admit substantial forms than the objection which is made that they could not be produced save by an actual creation, and that the Schoolmen are pitiable in their endeavours to answer this.' But there is nothing more convenient for me and for my system than this same objection. For I maintain that all the Souls, Entelechies or primitive forces, substantial forms, simple substances, or Monads, whatever name one may apply to them, can neither spring up naturally nor perish. And the qualities or derivative forces, or what are

called accidental forms, I take to be modifications of the primitive Entelechy, even as shapes are modifications of matter. That is why these modifications are perpetually changing, while the simple substance remains.

397. I have shown already (part I, § 86 *seqq.*) that souls cannot spring up naturally, or be derived from one another, and that it is necessary that ours either be created or be pre-existent. I have even pointed out a certain middle way between a creation and an entire pre-existence. I find it appropriate to say that the soul preexisting in the seeds from the beginning of things was only sentient, but that it was elevated to the superior degree, which is that of reason, when the man to whom this soul should belong was conceived, and when the organic body, always accompanying this soul from the beginning, but under many changes, was determined for forming the human body. I considered also that one might attribute this elevation of the sentient soul (which makes it reach a more sublime degree of being, namely reason) to the extraordinary operation of God. Nevertheless it will be well to add that I would dispense with miracles in the generating of man, as in that of the other animals. It will be possible to explain that, if one imagines that in this great number of souls and of animals, or at least of living organic bodies which are in the seeds, those souls alone which are destined to attain one day to human nature contain the reason that shall appear therein one day, and the organic bodies of these souls alone are preformed and predisposed to assume one day the human shape, while the other small animals or seminal living beings, in which no such thing is pre-established, are essentially different from them and possessed only of an inferior nature. This production is a kind of *traduction*, but more manageable than that kind which is commonly taught: it does not derive the soul from a soul, but only the animate from an animate, and it avoids the repeated miracles of a new creation, which would cause a new and pure soul to enter a body that must corrupt it.

398. I am, however, of the same opinion as Father Malebranche, that, in general, creation properly understood is not so difficult to admit as might be supposed, and that it is in a sense involved in the notion of the dependence of creatures. ‘How stupid and ridiculous are the Philosophers!’ (he exclaims, in his *Christian Meditations*, 9, No. 3). ‘They assume that Creation is impossible, because they cannot conceive how God’s power is great enough to make something from nothing. But can they any better conceive how the power of God is capable of stirring a straw?’ He adds, again with great truth (No. 5), ‘If matter were uncreate, God could not move it or form anything from it. For God cannot move matter, or arrange it wisely, if he does not know it. Now God cannot know it, if he does not give it being: he can derive his knowledge only from himself. Nothing can act on him or enlighten him.’

399. M. Bayle, not content with saying that we are created continually, insists also on this other doctrine which he would fain derive thence: that our soul cannot act. This is the way he speaks on that matter (ch. 141,): ‘He has too much acquaintance with Cartesianism’ (it is of an able opponent he is speaking) ‘not to know with what force it has been maintained in our day that there is no creature capable of producing motion, and that our soul is a purely passive subject in relation to sensations and ideas, and feelings of pain and of pleasure, etc. If this has not been carried as far as the volitions, that is on account of the existence of revealed truths; otherwise the acts of the will would have been found as passive as those of the understanding. The same reasons which prove that our soul does not form our ideas, and does not stir our organs, would prove also that it cannot form our acts of love and our volitions, etc’ He might add: our vicious actions, our crimes.

400. The force of these proofs, which he praises, must not be so great as he thinks, for if it were they would prove too much. They would make God the author of sin. I admit that the soul cannot stir the organs by a physical

influence; for I think that the body must have been so formed beforehand that it would do in time and place that which responds to the volitions of the soul, although it be true nevertheless that the soul is the principle of the operation. But if it be said that the soul does not produce its thoughts, its sensations, its feelings of pain and of pleasure, that is something for which I see no reason. In my system every simple substance (that is, every true substance) must be the true immediate cause of all its actions and inward passions; and, speaking strictly in a metaphysical sense, it has none other than those which it produces. Those who hold a different opinion, and who make God the sole agent, are needlessly becoming involved in expressions whence they will only with difficulty extricate themselves without offence against religion; moreover, they unquestionably offend against reason.

401. Here is, however, the foundation of M. Bayle's argument. He says that we do not do that of which we know not the way it is done. But it is a principle which I do not concede to him. Let us listen to his dissertation (seqq.): 'It is an astonishing thing that almost all philosophers (with the exception of those who expounded Aristotle, and who admitted a universal intelligence distinct from our soul, and cause of our perceptions: see in the *Historical and Critical Dictionary*, Note E of the article "Averroes") have shared the popular belief that we form our ideas actively. Yet where is the man who knows not on the one hand that he is in absolute ignorance as to how ideas are made, and on the other hand, that he could not sew two stitches if he were ignorant of how to sew? Is the sewing of two stitches in itself a work more difficult than the painting in one's mind of a rose, the very first time one's eyes rest upon it, and although one has never learnt this kind of painting? Does it not appear on the contrary that this mental portrait is in itself a work more difficult than tracing on canvas the shape of a flower, a thing we cannot do without having learnt it? We are all convinced that a key would be of no use to us for opening a chest if we were ignorant

as to how to use the key, and yet we imagine that our soul is the efficient cause of the movement of our arms, despite that it knows neither where the nerves are which must be used for this movement, nor whence to obtain the animal spirits that are to flow into these nerves. We have the experience every day that the ideas we would fain recall do not come, and that they appear of themselves when we are no longer thinking of them. If that does not prevent us from thinking that we are their efficient cause, what reliance shall one place on the proof of feeling, which to M. Jacquelot appears so conclusive? Does our authority over our ideas more often fall short than our authority over our volitions? If we were to count up carefully, we should find in the course of our life more velleities than volitions, that is, more evidences of the servitude of our will than of its dominion. How many times does one and the same man not experience an inability to do a certain act of will (for example, an act of love for a man who had just injured him; an act of scorn for a fine sonnet that he had composed; an act of hatred for a mistress; an act of approval of an absurd epigram. Take note that I speak only of inward acts, expressed by an "I will", such as "I will scorn", "approve", etc.) even if there were a hundred pistoles to be gained forthwith, and he ardently desired to gain these hundred pistoles, and he were fired with the ambition to convince himself by an experimental proof that he is master in his own domain?

402. 'To put together in few words the whole force of what I have just said to you, I will observe that it is evident to all those who go deeply into things, that the true efficient cause of an effect must know the effect, and be aware also of the way in which it must be produced. That is not necessary when one is only the instrument of the cause, or only the passive subject of its action; but one cannot conceive of it as not necessary to a true agent. Now if we examine ourselves well we shall be strongly convinced, (1) that, independently of experience, our soul is just as little aware of what a

volition is as of what an idea is; (2) that after a long experience it is no more fully aware of how volitions are formed than it was before having willed anything. What is one to conclude from that, save that the soul cannot be the efficient cause of its volitions, any more than of its ideas, and of the motion of the spirits which cause our arms to move? (Take note that no pretence is made of deciding the point here absolutely, it is only being considered in relation to the principles of the objection.)'

403. That is indeed a strange way of reasoning! What necessity is there for one always to be aware how that which is done is done? Are salts, metals, plants, animals and a thousand other animate or inanimate bodies aware how that which they do is done, and need they be aware? Must a drop of oil or of fat understand geometry in order to become round on the surface of water? Sewing stitches is another matter: one acts for an end, one must be aware of the means. But we do not form our ideas because we will to do so, they form themselves within us, they form themselves through us, not in consequence of our will, but in accordance with our nature and that of things. The foetus forms itself in the animal, and a thousand other wonders of nature are produced by a certain *instinct* that God has placed there, that is by virtue of *divine preformation*, which has made these admirable automata, adapted to produce mechanically such beautiful effects. Even so it is easy to believe that the soul is a spiritual automaton still more admirable, and that it is through divine preformation that it produces these beautiful ideas, wherein our will has no part and to which our art cannot attain. The operation of spiritual automata, that is of souls, is not mechanical, but it contains in the highest degree all that is beautiful in mechanism. The movements which are developed in bodies are concentrated in the soul by representation as in an ideal world, which expresses the laws of the actual world and their consequences, but with this difference from the perfect ideal world which is in God, that most of the perceptions in the other substances

are only confused. For it is plain that every simple substance embraces the whole universe in its confused perceptions or sensations, and that the succession of these perceptions is regulated by the particular nature of this substance, but in a manner which always expresses all the nature in the universe; and every present perception leads to a new perception, just as every movement that it represents leads to another movement. But it is impossible that the soul can know clearly its whole nature, and perceive how this innumerable number of small perceptions, piled up or rather concentrated together, shapes itself there: to that end it must needs know completely the whole universe which is embraced by them, that is, it must needs be a God.

404. As regards *velleities*, they are only a very imperfect kind of conditional will. I would, if I could: *liberet si liceret*; and in the case of a velleity, we do not will, properly speaking, to will, but to be able. That explains why there are none in God; and they must not be confused with antecedent will. I have explained sufficiently elsewhere that our control over volitions can be exercised only indirectly, and that one would be unhappy if one were sufficiently master in one's own domain to be able to will without cause, without rhyme or reason. To complain of not having such a control would be to argue like Pliny, who carps at the power of God because God cannot destroy himself.

405. I intended to finish here after having met (as it seems to me) all the objections of M. Bayle on this matter that I could find in his works. But remembering Laurentius Valla's *Dialogue on Free Will,* in opposition to Boethius, which I have already mentioned, I thought it would be opportune to quote it in abstract, retaining the dialogue form, and then to continue from where it ends, keeping up the fiction it initiated; and that less with the purpose of enlivening the subject, than in order to explain myself towards the end of my dissertation as clearly as I can, and in a way most likely to be

generally understood. This Dialogue of Valla and his books on Pleasure and the True Good make it plain that he was no less a philosopher than a humanist. These four books were opposed to the four books on the *Consolation of Philosophy* by Boethius, and the Dialogue to the fifth book. A certain Spaniard named Antonio Glarea requests of him elucidation on the difficulty of free will, whereof little is known as it is worthy to be known, for upon it depend justice and injustice, punishment and reward in this life and in the life to come. Laurentius Valla answers him that we must console ourselves for an ignorance which we share with the whole world, just as one consoles oneself for not having the wings of birds.

406. antonio — I know that you can give me those wings, like another Daedalus, so that I may emerge from the prison of ignorance, and rise to the very region of truth, which is the homeland of souls. The books that I have seen have not satisfied me, not even the famous Boethius, who meets with general approval. I know not whether he fully understood himself what he says of God's understanding, and of eternity superior to time; and I ask for your opinion on his way of reconciling foreknowledge with freedom. laurent — I am fearful of giving offence to many people, if I confute this great man; yet I will give preference over this fear to the consideration I have for the entreaties of a friend, provided that you make me a promise. ant. — What? laur. — It is, that when you have dined with me you do not ask me to give you supper, that is to say, I desire that you be content with the answer to the question you have put to me, and do not put a further question.

407. ant. — I promise you. Here is the heart of the difficulty. If God foresaw the treason of Judas, it was necessary that he should betray, it was impossible for him not to betray. There is no obligation to do the impossible. He therefore did not sin, he did not deserve to be punished. That destroys justice and religion, and the fear of God. laur. — God foresaw sin;

but he did not compel man to commit it; sin is voluntary. ant. — That will was necessary, since it was foreseen. laur. — If my knowledge does not cause things past or present to exist, neither will my foreknowledge cause future things to exist.

408. ant. — That comparison is deceptive: neither the present nor the past can be changed, they are already necessary; but the future, movable in itself, becomes fixed and necessary through foreknowledge. Let us pretend that a god of the heathen boasts of knowing the future: I will ask him if he knows which foot I shall put foremost, then I will do the opposite of that which he shall have foretold. laur. — This God knows what you are about to do. ant. — How does he know it, since I will do the opposite of what he shall have said, and I suppose that he will say what he thinks? laur. — Your supposition is false: God will not answer you; or again, if he were to answer you, the veneration you would have for him would make you hasten to do what he had said; his prediction would be to you an order. But we have changed the question. We are not concerned with what God will foretell but with what he foresees. Let us therefore return to foreknowledge, and distinguish between the necessary and the certain. It is not impossible for what is foreseen not to happen; but it is infallibly sure that it will happen. I can become a Soldier or Priest, but I shall not become one.

409. ant. — Here I have you firmly held. The philosophers' rule maintains that all that which is possible can be considered as existing. But if that which you affirm to be possible, namely an event different from what has been foreseen, actually happened, God would have been mistaken. laur. — The rules of the philosophers are not oracles for me. This one in particular is not correct. Two contradictories are often both possible. Can they also both exist? But, for your further enlightenment, let us pretend that Sextus Tarquinius, coming to Delphi to consult the Oracle of Apollo, receives the answer:

Exul inopsque cades irata pulsus ab urbe.

A beggared outcast of the city's rage,

Beside a foreign shore cut short thy age.

The young man will complain: I have brought you a royal gift, O Apollo, and you proclaim for me a lot so unhappy? Apollo will say to him: Your gift is pleasing to me, and I will do that which you ask of me, I will tell you what will happen. I know the future, but I do not bring it about. Go make your complaint to Jupiter and the Parcae. Sextus would be ridiculous if he continued thereafter to complain about Apollo. Is not that true? ant. — He will say: I thank you, O holy Apollo, for not having repaid me with silence, for having revealed to me the Truth. But whence comes it that Jupiter is so cruel towards me, that he prepares so hard a fate for an innocent man, for a devout worshipper of the Gods? laur. — You innocent? Apollo will say. Know that you will be proud, that you will commit adulteries, that you will be a traitor to your country. Could Sextus reply: It is you who are the cause, O Apollo; you compel me to do it, by foreseeing it? ant. — I admit that he would have taken leave of his senses if he were to make this reply. laur. — Therefore neither can the traitor Judas complain of God's foreknowledge. And there is the answer to your question.

410. ant. — You have satisfied me beyond my hopes, you have done what Boethius was not able to do: I shall be beholden to you all my life long. laur. — Yet let us carry our tale a little further. Sextus will say: No, Apollo, I will not do what you say. ant. — What! the God will say, do you mean then that I am a liar? I repeat to you once more, you will do all that I have just said. laur. — Sextus, mayhap, would pray the Gods to alter fate, to give him a better heart. ant. — He would receive the answer:

Desine fata Deum flecti sperare precando.

He cannot cause divine foreknowledge to lie. But what then will Sextus say? Will he not break forth into complaints against the Gods? Will he not

say? What? I am then not free? It is not in my power to follow virtue? laur. — Apollo will say to him perhaps: Know, my poor Sextus, that the Gods make each one as he is. Jupiter made the wolf ravening, the hare timid, the ass stupid, and the lion courageous. He gave you a soul that is wicked and irreclaimable; you will act in conformity with your natural disposition, and Jupiter will treat you as your actions shall deserve; he has sworn it by the Styx.

411. ant. — I confess to you, it seems to me that Apollo in excusing himself accuses Jupiter more than he accuses Sextus, and Sextus would answer him: Jupiter therefore condemns in me his own crime; it is he who is the only guilty one. He could have made me altogether different: but, made as I am, I must act as he has willed. Why then does he punish me? Could I have resisted his will? laur. — I confess that I am brought to a pause here as you are. I have made the Gods appear on the scene, Apollo and Jupiter, to make you distinguish between divine foreknowledge and providence. I have shown that Apollo and foreknowledge do not impair freedom; but I cannot satisfy you on the decrees of Jupiter's will, that is to say, on the orders of providence. ant. — You have dragged me out of one abyss, and you plunge me back into another and greater abyss. laur. — Remember our contract: I have given you dinner, and you ask me to give you supper also.

412. ant. — Now I discover your cunning: You have caught me, this is not an honest contract. laur. — What would you have me do? I have given you wine and meats from my home produce, such as my small estate can provide; as for nectar and ambrosia, you will ask the Gods for them: that divine nurture is not found among men. Let us hearken to St. Paul, that chosen vessel who was carried even to the third heaven, who heard there unutterable words: he will answer you with the comparison of the potter, with the incomprehensibility of the ways of God, and wonder at the depth of his wisdom. Nevertheless it is well to observe that one does not ask why

God foresees the thing, for that is understood, it is because it will be: but one asks why he ordains thus, why he hardens such an one, why he has compassion on another. We do not know the reasons which he may have for this; but *since he is very good and very wise that is enough to make us deem that his reasons are good*. As he is just also, it follows that his decrees and his operation do not destroy our freedom. Some men have sought some reason therein. They have said that we are made from a corrupt and impure mass, indeed of mud. But Adam and the Angels were made of silver and gold, and they sinned notwithstanding. One sometimes becomes hardened again after regeneration. We must therefore seek another cause for evil, and I doubt whether even the Angels are aware of it; yet they cease not to be happy and to praise God. Boethius hearkened more to the answer of philosophy than to that of St. Paul; that was the cause of his failure. Let us believe in Jesus Christ, he is the virtue and the wisdom of God: he teaches us that God willeth the salvation of all, that he willeth not the death of the sinner. Let us therefore put our trust in the divine mercy, and let us not by our vanity and our malice disqualify ourselves to receive it.

413. This dialogue of Valla's is excellent, even though one must take exception to some points in it: but its chief defect is that it cuts the knot and that it seems to condemn providence under the name of Jupiter, making him almost the author of sin. Let us therefore carry the little fable still further. Sextus, quitting Apollo and Delphi, seeks out Jupiter at Dodona. He makes sacrifices and then he exhibits his complaints. Why have you condemned me, O great God, to be wicked and unhappy? Change my lot and my heart, or acknowledge your error. Jupiter answers him: If you will renounce Rome, the Parcae shall spin for you different fates, you shall become wise, you shall be happy. sextus — Why must I renounce the hope of a crown? Can I not come to be a good king? jupiter — No, Sextus; I know better what is needful for you. If you go to Rome, you are lost. Sextus, not being

able to resolve upon so great a sacrifice, went forth from the temple, and abandoned himself to his fate. Theodorus, the High Priest, who had been present at the dialogue between God and Sextus, addressed these words to Jupiter: Your wisdom is to be revered, O great Ruler of the Gods. You have convinced this man of his error; he must henceforth impute his unhappiness to his evil will; he has not a word to say. But your faithful worshippers are astonished; they would fain wonder at your goodness as well as at your greatness: it rested with you to give him a different will. jupiter — Go to my daughter Pallas, she will inform you what I was bound to do.

414. Theodorus journeyed to Athens: he was bidden to lie down to sleep in the temple of the Goddess. Dreaming, he found himself transported into an unknown country. There stood a palace of unimaginable splendour and prodigious size. The Goddess Pallas appeared at the gate, surrounded by rays of dazzling majesty.

Qualisque videri
Coelicolis et quanta solet.

She touched the face of Theodorus with an olive-branch, which she was holding in her hand. And lo! he had become able to confront the divine radiancy of the daughter of Jupiter, and of all that she should show him. Jupiter who loves you (she said to him) has commended you to me to be instructed. You see here the palace of the fates, where I keep watch and ward. Here are representations not only of that which happens but also of all that which is possible. Jupiter, having surveyed them before the beginning of the existing world, classified the possibilities into worlds, and chose the best of all. He comes sometimes to visit these places, to enjoy the pleasure of recapitulating things and of renewing his own choice, which cannot fail to please him. I have only to speak, and we shall see a whole world that my father might have produced, wherein will be represented anything that can be asked of him; and in this way one may know also what would happen if any particular possibility should attain unto existence. And whenever the conditions are not determinate enough, there will be as many such worlds differing from one another as one shall wish, which will answer differently the same question, in as many ways as possible. You learnt geometry in your youth, like all well-instructed Greeks. You know therefore that when the conditions of a required point do not sufficiently determine it, and there is an infinite number of them, they all fall into what the geometricians call a locus, and this locus at least (which is often a line) will be determinate. Thus you can picture to yourself an ordered succession of worlds, which shall contain each and every one the case that is in question, and shall vary its circumstances and its consequences. But if you put a case that differs from the actual world only in one single definite thing and in its results, a certain one of those determinate worlds will answer you. These worlds are all here, that is, in ideas. I will show you some, wherein shall be found, not absolutely the same Sextus as you have seen (that is not possible, he carries with him always that which he shall be) but several Sextuses resembling

him, possessing all that you know already of the true Sextus, but not all that is already in him imperceptibly, nor in consequence all that shall yet happen to him. You will find in one world a very happy and noble Sextus, in another a Sextus content with a mediocre state, a Sextus, indeed, of every kind and endless diversity of forms.

415. Thereupon the Goddess led Theodorus into one of the halls of the palace: when he was within, it was no longer a hall, it was a world,

Solemque suum, sua sidera norat.

At the command of Pallas there came within view Dodona with the temple of Jupiter, and Sextus issuing thence; he could be heard saying that he would obey the God. And lo! he goes to a city lying between two seas, resembling Corinth. He buys there a small garden; cultivating it, he finds a treasure; he becomes a rich man, enjoying affection and esteem; he dies at a great age, beloved of the whole city. Theodorus saw the whole life of Sextus as at one glance, and as in a stage presentation. There was a great volume of writings in this hall: Theodorus could not refrain from asking what that meant. It is the history of this world which we are now visiting, the Goddess told him; it is the book of its fates. You have seen a number on the forehead of Sextus. Look in this book for the place which it indicates. Theodorus looked for it, and found there the history of Sextus in a form more ample than the outline he had seen. Put your finger on any line you please, Pallas said to him, and you will see represented actually in all its detail that which the line broadly indicates. He obeyed, and he saw coming into view all the characteristics of a portion of the life of that Sextus. They passed into another hall, and lo! another world, another Sextus. who, issuing from the temple, and having resolved to obey Jupiter, goes to Thrace. There he marries the daughter of the king, who had no other children; he succeeds him, and he is adored by his subjects. They went into other rooms, and always they saw new scenes.

416. The halls rose in a pyramid, becoming even more beautiful as one mounted towards the apex, and representing more beautiful worlds. Finally they reached the highest one which completed the pyramid, and which was the most beautiful of all: for the pyramid had a beginning, but one could not see its end; it had an apex, but no base; it went on increasing to infinity. That is (as the Goddess explained) because amongst an endless number of possible worlds there is the best of all, else would God not have determined to create any; but there is not any one which has not also less perfect worlds below it: that is why the pyramid goes on descending to infinity. Theodorus, entering this highest hall, became entranced in ecstasy; he had to receive succour from the Goddess, a drop of a divine liquid placed on his tongue restored him; he was beside himself for joy. We are in the real true world (said the Goddess) and you are at the source of happiness. Behold what Jupiter makes ready for you, if you continue to serve him faithfully. Here is Sextus as he is, and as he will be in reality. He issues from the temple in a rage, he scorns the counsel of the Gods. You see him going to Rome, bringing confusion everywhere, violating the wife of his friend. There he is driven out with his father, beaten, unhappy. If Jupiter had placed here a Sextus happy at Corinth or King in Thrace, it would be no longer this world. And nevertheless he could not have failed to choose this world, which surpasses in perfection all the others, and which forms the apex of the pyramid. Else would Jupiter have renounced his wisdom, he would have banished me, me his daughter. You see that my father did not make Sextus wicked; he was so from all eternity, he was so always and freely. My father only granted him the existence which his wisdom could not refuse to the world where he is included: he made him pass from the region of the possible to that of the actual beings. The crime of Sextus serves for great things: it renders Rome free; thence will arise a great empire, which will show noble examples to mankind. But that is nothing in comparison with

the worth of this whole world, at whose beauty you will marvel, when, after a happy passage from this mortal state to another and better one, the Gods shall have fitted you to know it.

417. At this moment Theodorus wakes up, he gives thanks to the Goddess, he owns the justice of Jupiter. His spirit pervaded by what he has seen and heard, he carries on the office of High Priest, with all the zeal of a true servant of his God, and with all the joy whereof a mortal is capable. It seems to me that this continuation of the tale may elucidate the difficulty which Valla did not wish to treat. If Apollo has represented aright God's knowledge of vision (that which concerns beings in existence), I hope that Pallas will have not discreditably filled the role of what is called knowledge of simple intelligence (that which embraces all that is possible), wherein at last the source of things must be sought.

APPENDICES

SUMMARY OF THE CONTROVERSY REDUCED TO FORMAL ARGUMENTS

SOME PERSONS OF discernment have wished me to make this addition. I have the more readily deferred to their opinion, because of the opportunity thereby gained for meeting certain difficulties, and for making observations on certain matters which were not treated in sufficient detail in the work itself.

objection i

Whoever does not choose the best course is lacking either in power, or knowledge, or goodness.

God did not choose the best course in creating this world.

Therefore God was lacking in power, or knowledge, or goodness.

answer

I deny the minor, that is to say, the second premiss of this syllogism, and the opponent proves it by this

prosyllogism

Whoever makes things in which there is evil, and which could have been made without any evil, or need not have been made at all, does not choose the best course.

God made a world wherein there is evil; a world, I say, which could have been made without any evil or which need not have been made at all.

Therefore God did not choose the best course.

answer

I admit the minor of this prosyllogism: for one must confess that there is evil in this world which God has made, and that it would have been possible

to make a world without evil or even not to create any world, since its creation depended upon the free will of God. But I deny the major, that is, the first of the two premisses of the prosyllogism, and I might content myself with asking for its proof. In order, however, to give a clearer exposition of the matter, I would justify this denial by pointing out that the best course is not always that one which tends towards avoiding evil, since it is possible that the evil may be accompanied by a greater good. For example, the general of an army will prefer a great victory with a slight wound to a state of affairs without wound and without victory. I have proved this in further detail in this work by pointing out, through instances taken from mathematics and elsewhere, that an imperfection in the part may be required for a greater perfection in the whole. I have followed therein the opinion of St. Augustine, who said a hundred times that God permitted evil in order to derive from it a good, that is to say, a greater good; and Thomas Aquinas says (in libr. 2, *Sent. Dist.* 32, qu. 1, art. 1) that the permission of evil tends towards the good of the universe. I have shown that among older writers the fall of Adam was termed *felix culpa*, a fortunate sin, because it had been expiated with immense benefit by the incarnation of the Son of God: for he gave to the universe something more noble than anything there would otherwise have been amongst created beings. For the better understanding of the matter I added, following the example of many good authors, that it was consistent with order and the general good for God to grant to certain of his creatures the opportunity to exercise their freedom, even when he foresaw that they would turn to evil: for God could easily correct the evil, and it was not fitting that in order to prevent sin he should always act in an extraordinary way. It will therefore sufficiently refute the objection to show that a world with evil may be better than a world without evil. But I have gone still further in the work, and have even shown that this universe must be indeed better than every other possible universe.

objection ii

If there is more evil than good in intelligent creatures, there is more evil than good in all God's work.

Now there is more evil than good in intelligent creatures.

Therefore there is more evil than good in all God's work.

answer

I deny the major and the minor of this conditional syllogism. As for the major, I do not admit it because this supposed inference from the part to the whole, from intelligent creatures to all creatures, assumes tacitly and without proof that creatures devoid of reason cannot be compared or taken into account with those that have reason. But why might not the surplus of good in the non-intelligent creatures that fill the world compensate for and even exceed incomparably the surplus of evil in rational creatures? It is true that the value of the latter is greater; but by way of compensation the others are incomparably greater in number; and it may be that the proportion of number and quantity surpasses that of value and quality.

The minor also I cannot admit, namely, that there is more evil than good in intelligent creatures. One need not even agree that there is more evil than good in the human kind. For it is possible, and even a very reasonable thing, that the glory and the perfection of the blessed may be incomparably greater than the misery and imperfection of the damned, and that here the excellence of the total good in the smaller number may exceed the total evil which is in the greater number. The blessed draw near to divinity through a divine Mediator, so far as can belong to these created beings, and make such progress in good as is impossible for the damned to make in evil, even though they should approach as nearly as may be the nature of demons. God is infinite, and the Devil is finite; good can and does go on *ad infinitum*, whereas evil has its bounds. It may be therefore, and it is probable, that

there happens in the comparison between the blessed and the damned the opposite of what I said could happen in the comparison between the happy and the unhappy, namely that in the latter the proportion of degrees surpasses that of numbers, while in the comparison between intelligent and non-intelligent the proportion of numbers is greater than that of values. One is justified in assuming that a thing may be so as long as one does not prove that it is impossible, and indeed what is here put forward goes beyond assumption.

But secondly, even should one admit that there is more evil than good in the human kind, one still has every reason for not admitting that there is more evil than good in all intelligent creatures. For there is an inconceivable number of Spirits, and perhaps of other rational creatures besides: and an opponent cannot prove that in the whole City of God, composed as much of Spirits as of rational animals without number and of endless different kinds, the evil exceeds the good. Although one need not, in order to answer an objection, prove that a thing is, when its mere possibility suffices, I have nevertheless shown in this present work that it is a result of the supreme perfection of the Sovereign of the Universe that the kingdom of God should be the most perfect of all states or governments possible, and that in consequence what little evil there is should be required to provide the full measure of the vast good existing there.

objection iii

If it is always impossible not to sin, it is always unjust to punish.

Now it is always impossible not to sin, or rather all sin is necessary.

Therefore it is always unjust to punish.

The minor of this is proved as follows.

first prosyllogism

Everything predetermined is necessary.

Every event is predetermined.

Therefore every event (and consequently sin also) is necessary.

Again this second minor is proved thus.

second prosyllogism

That which is future, that which is foreseen, that which is involved in causes is predetermined.

Every event is of this kind.

Therefore every event is predetermined.

answer

I admit in a certain sense the conclusion of the second prosyllogism, which is the minor of the first; but I shall deny the major of the first prosyllogism, namely that everything predetermined is necessary; taking 'necessity', say the necessity to sin, or the impossibility of not sinning, or of not doing some action, in the sense relevant to the argument, that is, as a necessity essential and absolute, which destroys the morality of action and the justice of punishment. If anyone meant a different necessity or impossibility (that is, a necessity only moral or hypothetical, which will be explained presently) it is plain that we would deny him the major stated in the objection. We might content ourselves with this answer, and demand the proof of the proposition denied: but I am well pleased to justify my manner of procedure in the present work, in order to make the matter clear and to throw more light on this whole subject, by explaining the necessity that must be rejected and the determination that must be allowed. The truth is that the necessity contrary to morality, which must be avoided and which would render punishment unjust, is an insuperable necessity, which would render all opposition unavailing, even though one should wish with all one's heart to avoid the necessary action, and though one should make all possible efforts to that end. Now it is plain that this is not applicable to voluntary actions, since one would not do them if one did not so desire. Thus their prevision and predetermination is not absolute, but it

presupposes will: if it is certain that one will do them, it is no less certain that one will will to do them. These voluntary actions and their results will not happen whatever one may do and whether one will them or not; but they will happen because one will do, and because one will will to do, that which leads to them. That is involved in prevision and predetermination, and forms the reason thereof. The necessity of such events is called conditional or hypothetical, or again necessity of consequence, because it presupposes the will and the other requisites. But the necessity which destroys morality, and renders punishment unjust and reward unavailing, is found in the things that will be whatever one may do and whatever one may will to do: in a word, it exists in that which is essential. This it is which is called an absolute necessity. Thus it avails nothing with regard to what is necessary absolutely to ordain interdicts or commandments, to propose penalties or prizes, to blame or to praise; it will come to pass no more and no less. In voluntary actions, on the contrary, and in what depends upon them, precepts, armed with power to punish and to reward, very often serve, and are included in the order of causes that make action exist. Thus it comes about that not only pains and effort but also prayers are effective, God having had even these prayers in mind before he ordered things, and having made due allowance for them. That is why the precept *Ora et labora* (Pray and work) remains intact. Thus not only those who (under the empty pretext of the necessity of events) maintain that one can spare oneself the pains demanded by affairs, but also those who argue against prayers, fall into that which the ancients even in their time called ‘the Lazy Sophism’. So the predetermination of events by their causes is precisely what contributes to morality instead of destroying it, and the causes incline the will without necessitating it. For this reason the determination we are concerned with is not a necessitation. It is certain (to him who knows all) that the effect will follow this inclination; but this effect does not follow thence by a

consequence which is necessary, that is, whose contrary implies contradiction; and it is also by such an inward inclination that the will is determined, without the presence of necessity. Suppose that one has the greatest possible passion (for example, a great thirst), you will admit that the soul can find some reason for resisting it, even if it were only that of displaying its power. Thus though one may never have complete indifference of equipoise, and there is always a predominance of inclination for the course adopted, that predominance does not render absolutely necessary the resolution taken.

objection iv

Whoever can prevent the sin of others and does not so, but rather contributes to it, although he be fully apprised of it, is accessary thereto.

God can prevent the sin of intelligent creatures; but he does not so, and he rather contributes to it by his co-operation and by the opportunities he causes, although he is fully cognizant of it.

Therefore, etc.

answer

I deny the major of this syllogism. It may be that one can prevent the sin, but that one ought not to do so, because one could not do so without committing a sin oneself, or (when God is concerned) without acting unreasonably. I have given instances of that, and have applied them to God himself. It may be also that one contributes to the evil, and that one even opens the way to it sometimes, in doing things one is bound to do. And when one does one's duty, or (speaking of God) when, after full consideration, one does that which reason demands, one is not responsible for events, even when one foresees them. One does not will these evils; but one is willing to permit them for a greater good, which one cannot in reason help preferring to other considerations. This is a *consequent* will, resulting from acts of *antecedent* will, in which one wills the good. I know that some

persons, in speaking of the antecedent and consequent will of God, have meant by the antecedent that which wills that all men be saved, and by the consequent that which wills, in consequence of persistent sin, that there be some damned, damnation being a result of sin. But these are only examples of a more general notion, and one may say with the same reason, that God wills by his antecedent will that men sin not, and that by his consequent or final and decretory will (which is always followed by its effect) he wills to permit that they sin, this permission being a result of superior reasons. One has indeed justification for saying, in general, that the antecedent will of God tends towards the production of good and the prevention of evil, each taken in itself, and as it were detached (*particulariter et secundum quid*: Thom. I, qu. 19, art. 6) according to the measure of the degree of each good or of each evil. Likewise one may say that the consequent, or final and total, divine will tends towards the production of as many goods as can be put together, whose combination thereby becomes determined, and involves also the permission of some evils and the exclusion of some goods, as the best possible plan of the universe demands. Arminius, in his *Antiperkinsus,* explained very well that the will of God can be called consequent not only in relation to the action of the creature considered beforehand in the divine understanding, but also in relation to other anterior acts of divine will. But it is enough to consider the passage cited from Thomas Aquinas, and that from Scotus (I, dist. 46, qu. 11), to see that they make this distinction as I have made it here. Nevertheless if anyone will not suffer this use of the terms, let him put ‘previous’ in place of ‘antecedent’ will, and ‘final’ or ‘decretory’ in place of ‘consequent’ will. For I do not wish to wrangle about words.

objection v

Whoever produces all that is real in a thing is its cause.

God produces all that is real in sin.

Therefore God is the cause of sin.

answer

I might content myself with denying the major or the minor, because the term ‘real’ admits of interpretations capable of rendering these propositions false. But in order to give a better explanation I will make a distinction. ‘Real’ either signifies that which is positive only, or else it includes also privative beings: in the first case, I deny the major and I admit the minor; in the second case, I do the opposite. I might have confined myself to that; but I was willing to go further, in order to account for this distinction. I have therefore been well pleased to point out that every purely positive or absolute reality is a perfection, and that every imperfection comes from limitation, that is, from the privative: for to limit is to withhold extension, or the more beyond. Now God is the cause of all perfections, and consequently of all realities, when they are regarded as purely positive. But limitations or privations result from the original imperfection of creatures which restricts their receptivity. It is as with a laden boat, which the river carries along more slowly or less slowly in proportion to the weight that it bears: thus the speed comes from the river, but the retardation which restricts this speed comes from the load. Also I have shown in the present work how the creature, in causing sin, is a deficient cause; how errors and evil inclinations spring from privation; and how privation is efficacious accidentally. And I have justified the opinion of St. Augustine (lib. I, *Ad. Simpl.* qu. 2) who explains (for example) how God hardens the soul, not in giving it something evil, but because the effect of the good he imprints is restricted by the resistance of the soul, and by the circumstances contributing to this resistance, so that he does not give it all the good that would overcome its evil. ‘Nec *(inquit)* ab illo erogatur aliquid quo homo fit deterior, sed tantum quo fit melior non erogatur.’ But if God had willed to do more here he must

needs have produced either fresh natures in his creatures or fresh miracles to change their natures, and this the best plan did not allow. It is just as if the current of the river must needs be more rapid than its slope permits or the boats themselves be less laden, if they had to be impelled at a greater speed. So the limitation or original imperfection of creatures brings it about that even the best plan of the universe cannot admit more good, and cannot be exempted from certain evils, these, however, being only of such a kind as may tend towards a greater good. There are some disorders in the parts which wonderfully enhance the beauty of the whole, just as certain dissonances, appropriately used, render harmony more beautiful. But that depends upon the answer which I have already given to the first objection.

objection vi

Whoever punishes those who have done as well as it was in their power to do is unjust.

God does so.

Therefore, etc.

answer

I deny the minor of this argument. And I believe that God always gives sufficient aid and grace to those who have good will, that is to say, who do not reject this grace by a fresh sin. Thus I do not admit the damnation of children dying unbaptized or outside the Church, or the damnation of adult persons who have acted according to the light that God has given them. And I believe that, *if anyone has followed the light he had*, he will undoubtedly receive thereof in greater measure as he has need, even as the late Herr Hulsemann, who was celebrated as a profound theologian at Leipzig, has somewhere observed; and if such a man had failed to receive light during his life, he would receive it at least in the hour of death.

objection vii

Whoever gives only to some, and not to all, the means of producing effectively in them good will and final saving faith has not enough goodness.

God does so.

Therefore, etc.

answer

I deny the major. It is true that God could overcome the greatest resistance of the human heart, and indeed he sometimes does so, whether by an inward grace or by the outward circumstances that can greatly influence souls; but he does not always do so. Whence comes this distinction, someone will say, and wherefore does his goodness appear to be restricted? The truth is that it would not have been in order always to act in an extraordinary way and to derange the connexion of things, as I have observed already in answering the first objection. The reasons for this connexion, whereby the one is placed in more favourable circumstances than the other, are hidden in the depths of God's wisdom: they depend upon the universal harmony. The best plan of the universe, which God could not fail to choose, required this. One concludes thus from the event itself; since God made the universe, it was not possible to do better. Such management, far from being contrary to goodness, has rather been prompted by supreme goodness itself. This objection with its solution might have been inferred from what was said with regard to the first objection; but it seemed advisable to touch upon it separately.

objection viii

Whoever cannot fail to choose the best is not free.

God cannot fail to choose the best.

Therefore God is not free.

answer

I deny the major of this argument. Rather is it true freedom, and the most perfect, to be able to make the best use of one's free will, and always to exercise this power, without being turned aside either by outward force or by inward passions, whereof the one enslaves our bodies and the other our souls. There is nothing less servile and more befitting the highest degree of freedom than to be always led towards the good, and always by one's own inclination, without any constraint and without any displeasure. And to object that God therefore had need of external things is only a sophism. He creates them freely: but when he had set before him an end, that of exercising his goodness, his wisdom determined him to choose the means most appropriate for obtaining this end. To call that a *need* is to take the term in a sense not usual, which clears it of all imperfection, somewhat as one does when speaking of the wrath of God.

Seneca says somewhere, that God commanded only once, but that he obeys always, because he obeys the laws that he willed to ordain for himself: *semel jussit, semper paret*. But he had better have said, that God always commands and that he is always obeyed: for in willing he always follows the tendency of his own nature, and all other things always follow his will. And as this will is always the same one cannot say that he obeys that will only which he formerly had. Nevertheless, although his will is always indefectible and always tends towards the best, the evil or the lesser good which he rejects will still be possible in itself. Otherwise the necessity of good would be geometrical (so to speak) or metaphysical, and altogether absolute; the contingency of things would be destroyed, and there would be no choice. But necessity of this kind, which does not destroy the possibility of the contrary, has the name by analogy only: it becomes effective not through the mere essence of things, but through that which is outside them and above them, that is, through the will of God. This necessity is called moral, because for the wise what is necessary and what is owing are

equivalent things; and when it is always followed by its effect, as it indeed is in the perfectly wise, that is, in God, one can say that it is a happy necessity. The more nearly creatures approach this, the closer do they come to perfect felicity. Moreover, necessity of this kind is not the necessity one endeavours to avoid, and which destroys morality, reward and commendation. For that which it brings to pass does not happen whatever one may do and whatever one may will, but because one desires it. A will to which it is natural to choose well deserves most to be commended; and it carries with it its own reward, which is supreme happiness. And as this constitution of the divine nature gives an entire satisfaction to him who possesses it, it is also the best and the most desirable from the point of view of the creatures who are all dependent upon God. If the will of God had not as its rule the principle of the best, it would tend towards evil, which would be worst of all; or else it would be indifferent somehow to good and to evil, and guided by chance. But a will that would always drift along at random would scarcely be any better for the government of the universe than the fortuitous concourse of corpuscles, without the existence of divinity. And even though God should abandon himself to chance only in some cases, and in a certain way (as he would if he did not always tend entirely towards the best, and if he were capable of preferring a lesser good to a greater good, that is, an evil to a good, since that which prevents a greater good is an evil) he would be no less imperfect than the object of his choice. Then he would not deserve absolute trust; he would act without reason in such a case, and the government of the universe would be like certain games equally divided between reason and luck. This all proves that this objection which is made against the choice of the best perverts the notions of free and necessary, and represents the best to us actually as evil: but that is either malicious or absurd.

EXCURSUS ON THEODICY

§ 392

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I said in my essays, § 392, that I wished to see the demonstrations mentioned by M. Bayle and contained in the sixth letter printed at Trévoux in 1703. Father des Bosses has shown me this letter, in which the writer essays to demonstrate by the geometrical method that God is the sole true cause of all that is real. My perusal of it has confirmed me in the opinion which I indicated in the same passage, namely, that this proposition can be true in a very good sense, God being the only cause of pure and absolute realities, or perfections; but when one includes limitations or privations under the name of realities one can say that second causes co-operate in the production of what is limited, and that otherwise God would be the cause of sin, and even its sole cause. And I am somewhat inclined to think that the gifted author of the letter does not greatly differ in opinion from me, although he seems to include all modalities among the realities of which he declares God to be the sole cause. For in actual fact I think he will not admit that God is the cause and the author of sin. Indeed, he explains himself in a manner which seems to overthrow his thesis and to grant real action to creatures. For in the proof of the eighth corollary of his second proposition these words occur: ‘The natural motion of the soul, although determinate in itself, is indeterminate in respect of its objects. For it is love of good in

general. It is through the ideas of good appearing in individual objects that this motion becomes individual and determinate in relation to those objects. And thus as the mind has the power of varying its own ideas it can also change the determinations of its love. And for that purpose it is not necessary that it overcome the power of God or oppose his action. These determinations of motion towards individual objects are not invincible. It is this noninvincibility which causes the mind to be free and capable of changing them; but after all the mind makes these changes only through the motion which God gives to it and conserves for it.' In my own style I would have said that the perfection which is in the action of the creature comes from God, but that the limitations to be found there are a consequence of the original limitation and the preceding limitations that occurred in the creature. Further, this is so not only in minds but also in all other substances, which thereby are causes co-operating in the change which comes to pass in themselves; for this determination of which the author speaks is nothing but a limitation.

Now if after that one reviews all the demonstrations or corollaries of the letter, one will be able to admit or reject the majority of its assertions, in accordance with the interpretation one may make of them. If by 'reality' one means only perfections or positive realities, God is the only true cause; but if that which involves limitations is included under the realities, one will deny a considerable portion of the theses, and the author himself will have shown us the example. It is in order to render the matter more comprehensible that I used in the Essays the example of a laden boat, which, the more laden it is, is the more slowly carried along by the stream. There one sees clearly that the stream is the cause of what is positive in this motion, of the perfection, the force, the speed of the boat, but that the load is the cause of the restriction of this force, and that it brings about the retardation.

It is praiseworthy in anyone to attempt to apply the geometrical method to metaphysical matters. But it must be admitted that hitherto success has seldom been attained: and M. Descartes himself, with all that very great skill which one cannot deny in him, never perhaps had less success than when he essayed to do this in one of his answers to objections. For in mathematics it is easier to succeed, because numbers, figures and calculations make good the defects concealed in words; but in metaphysics, where one is deprived of this aid (at least in ordinary argumentation), the strictness employed in the form of the argument and in the exact definitions of the terms must needs supply this lack. But in neither argument nor definition is that strictness here to be seen.

The author of the letter, who undoubtedly displays much ardour and penetration, sometimes goes a little too far, as when he claims to prove that there is as much reality and force in rest as in motion, according to the fifth corollary of the second proposition. He asserts that the will of God is no less positive in rest than in motion, and that it is not less invincible. Be it so, but does it follow that there is as much reality and force in each of the two? I do not see this conclusion, and with the same argument one would prove that there is as much force in a strong motion as in a weak motion. God in willing rest wills that the body be at the place A, where it was immediately before, and for that it suffices that there be no reason to prompt God to the change. But when God wills that afterwards the body be at the place B, there must needs be a new reason, of such a kind as to determine God to will that it be in B and not in C or in any other place, and that it be there more or less promptly. It is upon these reasons, the volitions of God, that we must assess the force and the reality existent in things. The author speaks much of the will of God, but he does not speak much in this letter of the reasons which prompt God to will, and upon which all depends. And these reasons are taken from the objects.

I observe first, indeed, with regard to the second corollary of the first proposition, that it is very true, but that it is not very well proven. The writer affirms that if God only ceased to will the existence of a being, that being would no longer exist; and here is the proof given word for word:

'Demonstration. That which exists only by the will of God no longer exists once that will has ceased.' (But that is what must be proved. The writer endeavours to prove it by adding:) 'Remove the cause, you remove the effect.' (This maxim ought to have been placed among the axioms which are stated at the beginning. But unhappily this axiom may be reckoned among those rules of philosophy which are subject to many exceptions.) 'Now by the preceding proposition and by its first corollary no being exists save by the will of God. Therefore, etc.' There is ambiguity in this expression, that nothing exists save by the will of God. If one means that things begin to exist only through this will, one is justified in referring to the preceding propositions; but if one means that the existence of things is at all times a consequence of the will of God, one assumes more or less what is in question. Therefore it was necessary to prove first that the existence of things depends upon the will of God, and that it is not only a mere effect of that will, but a dependence, in proportion to the perfection which things contain; and once that is assumed, they will depend upon God's will no less afterwards than at the beginning. That is the way I have taken the matter in my Essays.

Nevertheless I recognize that the letter upon which I have just made observations is admirable and well deserving of perusal, and that it contains noble and true sentiments, provided it be taken in the sense I have just indicated. And arguments in this form may serve as an introduction to meditations somewhat more advanced.

REFLEXIONS ON THE WORK THAT MR. HOBBES PUBLISHED IN ENGLISH ON ‘FREEDOM, NECESSITY AND CHANCE’

1. AS THE question of Necessity and Freedom, with other questions depending thereon, was at one time debated between the famous Mr. Hobbes and Dr. John Bramhall, Bishop of Derry, in books published by each of them, I have deemed it appropriate to give a clear account of them (although I have already mentioned them more than once); and this all the more since these writings of Mr. Hobbes have hitherto only appeared in English, and since the works of this author usually contain something good and ingenious. The Bishop of Derry and Mr. Hobbes, having met in Paris at the house of the Marquis, afterwards Duke, of Newcastle in the year 1646, entered into a discussion on this subject. The dispute was conducted with extreme restraint; but the bishop shortly afterwards sent a note to My Lord Newcastle, desiring him to induce Mr. Hobbes to answer it. He answered; but at the same time he expressed a wish that his answer should not be published, because he believed it possible for ill-instructed persons to abuse dogmas such as his, however true they might be. It so happened, however, that Mr. Hobbes himself passed it to a French friend, and allowed a young Englishman to translate it into French for the benefit of this friend. This young man kept a copy of the English original, and published it later in England without the author’s knowledge. Thus the bishop was obliged to reply to it, and Mr. Hobbes to make a rejoinder, and to publish all the pieces together in a book of 348 pages printed in London in the year 1656, in 4to. entitled, *Questions concerning Freedom, Necessity and Chance, elucidated and discussed between Doctor Bramhall, Bishop of Derry, and Thomas Hobbes of Malmesbury*. There is a later edition, of the year 1684, in

a work entitled *Hobbes's Tripos*, where are to be found his book on human nature, his treatise on the body politic and his treatise on freedom and necessity; but the latter does not contain the bishop's reply, nor the author's rejoinder. Mr. Hobbes argues on this subject with his usual wit and subtlety; but it is a pity that in both the one and the other we stumble upon petty tricks, such as arise in excitement over the game. The bishop speaks with much vehemence and behaves somewhat arrogantly. Mr. Hobbes for his part is not disposed to spare the other, and manifests rather too much scorn for theology, and for the terminology of the Schoolmen, which is apparently favoured by the bishop.

2. One must confess that there is something strange and indefensible in the opinions of Mr. Hobbes. He maintains that doctrines touching the divinity depend entirely upon the determination of the sovereign, and that God is no more the cause of the good than of the bad actions of creatures. He maintains that all that which God does is just, because there is none above him with power to punish and constrain him. Yet he speaks sometimes as if what is said about God were only compliments, that is to say expressions proper for paying him honour, but not for knowing him. He testifies also that it seems to him that the pains of the wicked must end in their destruction: this opinion closely approaches that of the Socinians, but it seems that Mr. Hobbes goes much further. His philosophy, which asserts that bodies alone are substances, hardly appears favourable to the providence of God and the immortality of the soul. On other subjects nevertheless he says very reasonable things. He shows clearly that nothing comes about by chance, or rather that chance only signifies the ignorance of causes that produce the effect, and that for each effect there must be a concurrence of all the sufficient conditions anterior to the event, not one of which, manifestly, can be lacking when the event is to follow, because they are conditions: the event, moreover, does not fail to follow when these

conditions exist all together, because they are sufficient conditions. All which amounts to the same as I have said so many times, that everything comes to pass as a result of determining reasons, the knowledge whereof, if we had it, would make us know at the same time why the thing has happened and why it did not go otherwise.

3. But this author's humour, which prompts him to paradoxes and makes him seek to contradict others, has made him draw out exaggerated and odious conclusions and expressions, as if everything happened through an absolute necessity. The Bishop of Derry, on the other hand, has aptly observed in the answer to article 35, page 327, that there results only a hypothetical necessity, such as we all grant to events in relation to the foreknowledge of God, while Mr. Hobbes maintains that even divine foreknowledge alone would be sufficient to establish an absolute necessity of events. This was also the opinion of Wyclif, and even of Luther, when he wrote *De Servo Arbitrio*; or at least they spoke so. But it is sufficiently acknowledged to-day that this kind of necessity which is termed hypothetical, and springs from foreknowledge or from other anterior reasons, has nothing in it to arouse one's alarm: whereas it would be quite otherwise if the thing were necessary of itself, in such a way that the contrary implied contradiction. Mr. Hobbes refuses to listen to anything about a moral necessity either, on the ground that everything really happens through physical causes. But one is nevertheless justified in making a great difference between the necessity which constrains the wise to do good, and which is termed moral, existing even in relation to God, and that blind necessity whereby according to Epicurus, Strato, Spinoza, and perhaps Mr. Hobbes, things exist without intelligence and without choice, and consequently without God. Indeed, there would according to them be no need of God, since in consequence of this necessity all would have existence through its own essence, just as necessarily as two and three make

five. And this necessity is absolute, because everything it carries with it must happen, whatever one may do; whereas what happens by a hypothetical necessity happens as a result of the supposition that this or that has been foreseen or resolved, or done beforehand; and moral necessity contains an obligation imposed by reason, which is always followed by its effect in the wise. This kind of necessity is happy and desirable, when one is prompted by good reasons to act as one does; but necessity blind and absolute would subvert piety and morality.

4. There is more reason in Mr. Hobbes's discourse when he admits that our actions are in our power, so that we do that which we will when we have the power to do it, and when there is no hindrance. He asserts notwithstanding that our volitions themselves are not so within our power that we can give ourselves, without difficulty and according to our good pleasure, inclinations and wills which we might desire. The bishop does not appear to have taken notice of this reflexion, which Mr. Hobbes also does not develop enough. The truth is that we have some power also over our volitions, but obliquely, and not absolutely and indifferently. This has been explained in some passages of this work. Finally Mr. Hobbes shows, like others before him, that the certainty of events, and necessity itself, if there were any in the way our actions depend upon causes, would not prevent us from employing deliberations, exhortations, blame and praise, punishments and rewards: for these are of service and prompt men to produce actions or to refrain from them. Thus, if human actions were necessary, they would be so through these means. But the truth is, that since these actions are not necessary absolutely whatever one may do, these means contribute only to render the actions determinate and certain, as they are indeed; for their nature shows that they are not subject to an absolute necessity. He gives also a good enough notion of *freedom*, in so far as it is taken in a general sense, common to intelligent and non-intelligent substances: he states that a

thing is deemed free when the power which it has is not impeded by an external thing. Thus the water that is dammed by a dyke has the power to spread, but not the freedom. On the other hand, it has not the power to rise above the dyke, although nothing would prevent it then from spreading, and although nothing from outside prevents it from rising so high. To that end it would be necessary that the water itself should come from a higher point or that the water-level should be raised by an increased flow. Thus a prisoner lacks the freedom, while a sick man lacks the power, to go his way.

5. There is in Mr. Hobbes's preface an abstract of the disputed points, which I will give here, adding some expression of opinion. *On one side* (he says) the assertion is made, (1) 'that it is not in the present power of man to choose for himself the will that he should have'. That is *well* said, especially in relation to present will: men choose the objects through will, but they do not choose their present wills, which spring from reasons and dispositions. It is true, however, that one can seek new reasons for oneself, and with time give oneself new dispositions; and by this means one can also obtain for oneself a will which one had not and could not have given oneself forthwith. It is (to use the comparison Mr. Hobbes himself uses) as with hunger or with thirst. At the present it does not rest with my will to be hungry or not; but it rests with my will to eat or not to eat; yet, for the time to come, it rests with me to be hungry, or to prevent myself from being so at such and such an hour of day, by eating beforehand. In this way it is possible often to avoid an evil will. Even though Mr. Hobbes states in his reply (No. 14,) that it is the manner of laws to say, you must do or you must not do this, but that there is no law saying, you must will, or you must not will it, yet it is clear that he is mistaken in regard to the Law of God, which says *non concupisces*, thou shalt not covet; it is true that this prohibition does not concern the first motions, which are involuntary. It is asserted (2) 'That hazard' (*chance* in English, *casus* in Latin) 'produces

nothing', that is, that nothing is produced without cause or reason. Very *right*, I admit it, if one thereby intends a real hazard. For fortune and hazard are only appearances, which spring from ignorance of causes or from disregard of them. (3) 'That all events have their necessary causes.' *Wrong*: they have their determining causes, whereby one can account for them; but these are not necessary causes. The contrary might have happened, without implying contradiction. (4) 'That the will of God makes the necessity of all things.' *Wrong*: the will of God produces only contingent things, which could have gone differently, since time, space and matter are indifferent with regard to all kinds of shape and movement.

6. *On the other side* (according to Mr. Hobbes) it is asserted, (1) 'That man is free' (absolutely) not only 'to choose what he wills to do, but also to choose what he wills to will.' That is *ill* said: one is not absolute master of one's will, to change it forthwith, without making use of some means or skill for that purpose. (2) 'When man wills a good action, the will of God co-operates with his, otherwise not.' That is *well* said, provided one means that God does not will evil actions, although he wills to permit them, to prevent the occurrence of something which would be worse than these sins. (3) 'That the will can choose whether it wills to will or not.' *Wrong*, with regard to present volition. (4) 'That things happen without necessity by chance.' *Wrong*: what happens without necessity does not because of that happen by chance, that is to say, without causes and reasons. (5) 'Notwithstanding that God may foresee that an event will happen, it is not necessary that it happen, since God foresees things, not as futurities and as in their causes, but as present.' That begins *well*, and finishes *ill*. One is justified in admitting the necessity of the consequence, but one has no reason to resort to the question how the future is present to God: for the necessity of the consequence does not prevent the event or consequent from being contingent in itself.

7. Our author thinks that since the doctrine revived by Arminius had been favoured in England by Archbishop Laud and by the Court, and important ecclesiastical promotions had been only for those of that party, this contributed to the revolt which caused the bishop and him to meet in their exile in Paris at the house of Lord Newcastle, and to enter into a discussion. I would not approve all the measures of Archbishop Laud, who had merit and perhaps also good will, but who appears to have goaded the Presbyterians excessively. Nevertheless one may say that the revolutions, as much in the Low Countries as in Great Britain, in part arose from the extreme intolerance of the strict party. One may say also that the defenders of the absolute decree were at least as strict as the others, having oppressed their opponents in Holland with the authority of Prince Maurice and having fomented the revolts in England against King Charles I. But these are the faults of men, and not of dogmas. Their opponents do not spare them either, witness the severity used in Saxony against Nicolas Krell and the proceedings of the Jesuits against the Bishop of Ypres's party.

8. Mr. Hobbes observes, after Aristotle, that there are two sources for proofs: reason and authority. As for reason, he says that he admits the reasons derived from the attributes of God, which he calls argumentative, and the notions whereof are conceivable; but he maintains that there are others wherein one conceives nothing, and which are only expressions by which we aspire to honour God. But I do not see how one can honour God by expressions that have no meaning. It may be that with Mr. Hobbes, as with Spinoza, wisdom, goodness, justice are only fictions in relation to God and the universe, since the prime cause, according to them, acts through the necessity of its power, and not by the choice of its wisdom. That is an opinion whose falsity I have sufficiently proved. It appears that Mr. Hobbes did not wish to declare himself enough, for fear of causing offence to people; on which point he is to be commended. It was also on that account,

as he says himself, that he had desired that what had passed between the bishop and him in Paris should not be published. He adds that it is not good to say that an action which God does not will happens, since that is to say in effect that God is lacking in power. But he adds also at the same time that it is not good either to say the opposite, and to attribute to God that he wills the evil; because that is not seemly, and would appear to accuse God of lack of goodness. He believes, therefore, that in these matters telling the truth is not advisable. He would be right if the truth were in the paradoxical opinions that he maintains. For indeed it appears that according to the opinion of this writer God has no goodness, or rather that that which he calls God is nothing but the blind nature of the mass of material things, which acts according to mathematical laws, following an absolute necessity, as the atoms do in the system of Epicurus. If God were as the great are sometimes here on earth, it would not be fitting to utter all the truths concerning him. But God is not as a man, whose designs and actions often must be concealed; rather it is always permissible and reasonable to publish the counsels and the actions of God, because they are always glorious and worthy of praise. Thus it is always right to utter truths concerning the divinity; one need not anyhow refrain from fear of giving offence. And I have explained, so it seems to me, in a way which satisfies reason, and does not wound piety, how it is to be understood that God's will takes effect, and concurs with sin, without compromising his wisdom and his goodness.

9. As to the authorities derived from Holy Scripture, Mr. Hobbes divides them into three kinds; some, he says, are for me, the second kind are neutral, and the third seem to be for my opponent. The passages which he thinks favourable to his opinion are those which ascribe to God the cause of our will. Thus Gen. xlv. 5, where Joseph says to his brethren, 'Be not grieved, nor angry with yourselves, that you sold me hither: for God did send me before you to preserve life'; and verse 8, 'it was not you that sent

me hither, but God.' And God said (Exod. vii. 3), 'I will harden Pharaoh's heart.' And Moses said (Deut. ii. 30), 'But Sihon King of Heshbon would not let us pass by him: for the Lord thy God hardened his spirit, and made his heart obstinate, that he might deliver him into thy hand.' And David said of Shimei (2 Sam. xvi. 10), 'Let him curse, because the Lord hath said unto him: Curse David. Who shall then say, wherefore hast thou done so?' And (1 Kings xii. 15), 'The King [Rehoboam] hearkened not unto the people; for the cause was from the Lord.' Job xii. 16: 'The deceived and the deceiver are his.' v. 17: 'He maketh the judges fools'; v. 24: 'He taketh away the heart of the chief of the people of the earth, and causeth them to wander in a wilderness'; v. 25: 'He maketh them to stagger like a drunken man.' God said of the King of Assyria (Isa. x. 6), 'Against the people will I give him a charge, to take the spoil, and to take the prey, and to tread them down like the mire of the streets.' And Jeremiah said (Jer. x. 23), 'O Lord, I know that the way of man is not in himself: it is not in man that walketh to direct his steps.' And God said (Ezek. iii. 20), 'When a righteous man doth turn from his righteousness, and commit iniquity, and I lay a stumbling-block before him, he shall die.' And the Saviour said (John vi. 44), 'No man can come to me, except the Father which hath sent me draw him.' And St. Peter (Acts ii. 23), 'Jesus having been delivered by the determinate counsel and foreknowledge of God, ye have taken.' And Acts iv. 27, 28, 'Both Herod and Pontius Pilate, with the Gentiles and the people of Israel, were gathered together, for to do whatsoever thy hand and thy counsel determined before to be done.' And St. Paul (Rom. ix. 16), 'It is not of him that willeth, nor of him that runneth, but of God that showeth mercy.' And v. 18: 'Therefore hath he mercy on whom he will have mercy, and whom he will he hardeneth'; v. 19: 'Thou wilt say then unto me, why doth he yet find fault? For who hath resisted his will?'; v. 20: 'Nay but, O man, who art thou that repliest against God? Shall the thing formed say to him that formed it, why

hast thou made me thus?' And 1 Cor. iv. 7: 'For who maketh thee to differ from another? and what hast thou that thou didst not receive?' And 1 Cor. xii. 6: 'There are diversities of operations, but it is the same God which worketh all in all.' And Eph. ii. 10: 'We are his workmanship, created in Christ Jesus unto good works, which God hath before ordained that we should walk in them.' And Phil. ii. 13: 'It is God which worketh in you both to will and to do of his good pleasure.' One may add to these passages all those which make God the author of all grace and of all good inclinations, and all those which say that we are as dead in sin.

10. Here now are the neutral passages, according to Mr. Hobbes. These are those where Holy Scripture says that man has the choice to act if he wills, or not to act if he wills not. For example Deut. xxx. 19: 'I call heaven and earth to record this day against you, that I have set before you life and death, blessing and cursing: therefore choose life, that both thou and thy seed may live.' And Joshua xxiv. 15: 'Choose you this day whom ye will serve.' And God said to Gad the prophet (2 Sam. xxiv. 12), 'Go and say unto David: Thus saith the Lord, I offer thee three things; choose thee one of them, that I may do it unto thee.' And Isa. vii. 16: 'Until the child shall know to refuse the evil and choose the good.' Finally the passages which Mr. Hobbes acknowledges to be apparently contrary to his opinion are all those where it is indicated that the will of man is not in conformity with that of God. Thus Isa. v. 4: 'What could have been done more to my vineyard, that I have not done in it? Wherefore, when I looked that it should bring forth grapes, brought it forth wild grapes?' And Jer. xix. 5: 'They have built also the high places of Baal, to burn their sons with fire for burnt offerings unto Baal; which I commanded not, nor spake it, neither came it into my mind.' And Hos. xiii. 9: 'O Israel, thou hast destroyed thyself; but in me is thine help.' And I Tim. ii. 4: 'God will have all men to be saved, and to come unto the knowledge of the truth.' He avows that he could quote very

many other passages, such as those which indicate that God willeth not iniquity, that he willeth the salvation of the sinner, and generally all those which declare that God commands good and forbids evil.

11. Mr. Hobbes makes answer to these passages that God does not always will that which he commands, as for example when he commanded Abraham to sacrifice his son, and that God's revealed will is not always his full will or his decree, as when he revealed to Jonah that Nineveh would perish in forty days. He adds also, that when it is said that God wills the salvation of all, that means simply that God commands that all do that which is necessary for salvation; when, moreover, the Scripture says that God wills not sin, that means that he wills to punish it. And as for the rest, Mr. Hobbes ascribes it to the forms of expression used among men. But one will answer him that it would be to God's discredit that his revealed will should be opposed to his real will: that what he bade Jonah say to the Ninevites was rather a threat than a prediction, and that thus the condition of impenitence was implied therein; moreover the Ninevites took it in this sense. One will say also, that it is quite true that God in commanding Abraham to sacrifice his son willed obedience, but did not will action, which he prevented after having obtained obedience; for that was not an action deserving in itself to be willed. And it is not the same in the case of actions where he exerts his will positively, and which are in fact worthy to be the object of his will. Of such are piety, charity and every virtuous action that God commands; of such is omission of sin, a thing more alien to divine perfection than any other. It is therefore incomparably better to explain the will of God as I have explained it in this work. Thus I shall say that God, by virtue of his supreme goodness, has in the beginning a serious inclination to produce, or to see and cause to be produced, all good and every laudable action, and to prevent, or to see and cause to fail, all evil and every bad action. But he is determined by this same goodness, united to an infinite

wisdom, and by the very concourse of all the previous and particular inclinations towards each good, and towards the preventing of each evil, to produce the best possible design of things. This is his final and decretory will. And this design of the best being of such a nature that the good must be enhanced therein, as light is enhanced by shade, by some evil which is incomparably less than this good, God could not have excluded this evil, nor introduced certain goods that were excluded from this plan, without wronging his supreme perfection. So for that reason one must say that he permitted the sins of others, because otherwise he would have himself performed an action worse than all the sin of creatures.

12. I find that the Bishop of Derry is at least justified in saying, article XV, in his Reply,, that the opinion of his opponents is contrary to piety, when they ascribe all to God's power only, and that Mr. Hobbes ought not to have said that honour or worship is only a sign of the power of him whom one honours: for one may also, and one must, acknowledge and honour wisdom, goodness, justice and other perfections. *Magnos facile laudamus, bonos libenter.* This opinion, which despoils God of all goodness and of all true justice, which represents him as a Tyrant, wielding an absolute power, independent of all right and of all equity, and creating millions of creatures to be eternally unhappy, and this without any other aim than that of displaying his power, this opinion, I say, is capable of rendering men very evil; and if it were accepted no other Devil would be needed in the world to set men at variance among themselves and with God; as the Serpent did in making Eve believe that God, when he forbade her the fruit of the tree, did not will her good. Mr. Hobbes endeavours to parry this thrust in his Rejoinder () by saying that goodness is a part of the power of God, that is to say, the power of making himself worthy of love. But that is an abuse of terms by an evasion, and confounds things that must be kept distinct. After all, if God does not intend the good of intelligent creatures, if

he has no other principles of justice than his power alone, which makes him produce either arbitrarily that which chance presents to him, or by necessity all that which is possible, without the intervention of choice founded on good, how can he make himself worthy of love? It is therefore the doctrine either of blind power or of arbitrary power, which destroys piety: for the one destroys the intelligent principle or the providence of God, the other attributes to him actions which are appropriate to the evil principle. Justice in God, says Mr. Hobbes (), is nothing but the power he has, which he exercises in distributing blessings and afflictions. This definition surprises me: it is not the power to distribute them, but the will to distribute them reasonably, that is, goodness guided by wisdom, which makes the justice of God. But, says he, justice is not in God as in a man, who is only just through the observance of laws made by his superior. Mr. Hobbes is mistaken also in that, as well as Herr Pufendorf, who followed him. Justice does not depend upon arbitrary laws of superiors, but on the eternal rules of wisdom and of goodness, in men as well as in God. Mr. Hobbes asserts in the same passage that the wisdom which is attributed to God does not lie in a logical consideration of the relation of means to ends, but in an incomprehensible attribute, attributed to an incomprehensible nature to honour it. It seems as if he means that it is an indescribable something attributed to an indescribable something, and even a chimerical quality given to a chimerical substance, to intimidate and to deceive the nations through the worship which they render to it. After all, it is difficult for Mr. Hobbes to have a different opinion of God and of wisdom, since he admits only material substances. If Mr. Hobbes were still alive, I would beware of ascribing to him opinions which might do him injury; but it is difficult to exempt him from this. He may have changed his mind subsequently, for he attained to a great age; thus I hope that his errors may not have been deleterious to him. But as they might be so to others, it is expedient to give

warnings to those who shall read the writings of one who otherwise is of great merit, and from whom one may profit in many ways. It is true that God does not reason, properly speaking, using time as we do, to pass from one truth to the other: but as he understands at one and the same time all the truths and all their connexions, he knows all the conclusions, and he contains in the highest degree within himself all the reasonings that we can develop. And just because of that his wisdom is perfect.

OBSERVATIONS ON THE BOOK CONCERNING ‘THE ORIGIN OF EVIL’ PUBLISHED RECENTLY IN LONDON

1. IT IS a pity that M. Bayle should have seen only the reviews of this admirable work, which are to be found in the journals. If he had read it himself and examined it properly, he would have provided us with a good opportunity of throwing light on many difficulties, which spring again and again like the head of the hydra, in a matter where it is easy to become confused when one has not seen the whole system or does not take the trouble to reason according to a strict plan. For strictness of reasoning performs in subjects that transcend imagination the same function as figures do in geometry: there must always be something capable of fixing our attention and forming a connexion between our thoughts. That is why when this Latin book, so learned and so elegant of style, printed originally in London and then reprinted in Bremen, fell into my hands, I judged that the seriousness of the matter and the author’s merit required an attention which readers might fairly expect of me, since we are agreed only in regard to half of the subject. Indeed, as the work contains five chapters, and the fifth with the appendix equals the rest in size, I have observed that the first four, where it is a question of evil in general and of physical evil in particular, are in harmony with my principles (save for a few individual passages), and that they sometimes even develop with force and eloquence some points I had treated but slightly because M. Bayle had not placed emphasis upon them. But the fifth chapter, with its sections (of which some are equal to entire chapters) speaking of freedom and of the moral evil dependent upon it, is constructed upon principles opposed to mine, and often, indeed, to those of M. Bayle; that is, if it were possible to credit him with any fixed

principles. For this fifth chapter tends to show (if that were possible) that true freedom depends upon an indifference of equipoise, vague, complete and absolute; so that, until the will has determined itself, there would be no reason for its determination, either in him who chooses or in the object; and one would not choose what pleases, but in choosing without reason one would cause what one chooses to be pleasing.

2. This principle of choice without cause or reason, of a choice, I say, divested of the aim of wisdom and goodness, is regarded by many as the great privilege of God and of intelligent substances, and as the source of their freedom, their satisfaction, their morality and their good or evil. The fantasy of a power to declare one's independence, not only of inclination, but of reason itself within and of good and evil without, is sometimes painted in such fine colours that one might take it to be the most excellent thing in the world. Nevertheless it is only a hollow fantasy, a suppression of the reasons for the caprice of which one boasts. What is asserted is impossible, but if it came to pass it would be harmful. This fantastic character might be attributed to some Don Juan in a St. Peter's Feast, and a man of romantic disposition might even affect the outward appearances of it and persuade himself that he has it in reality. But in Nature there will never be any choice to which one is not prompted by the previous representation of good or evil, by inclinations or by reasons: and I have always challenged the supporters of this absolute indifference to show an example thereof. Nevertheless if I call fantastic this choice whereto one is determined by nothing, I am far from calling visionaries the supporters of that hypothesis, especially our gifted author. The Peripatetics teach some beliefs of this nature; but it would be the greatest injustice in the world to be ready to despise on that account an Occam, a Suisset, a Cesalpino, a Conringius, men who still advocated certain scholastic opinions which have been improved upon to-day.

3. One of these opinions, revived, however, and introduced by degenerate scholasticism, and in the Age of Chimeras, is vague indifference of choice, or real chance, assumed in our souls; as if nothing gave us any inclination unless we perceived it distinctly, and as if an effect could be without causes, when these causes are imperceptible. It is much as some have denied the existence of insensible corpuscles because they do not see them. Modern philosophers have improved upon the opinions of the Schoolmen by showing that, according to the laws of corporeal nature, a body can only be set in motion by the movement of another body propelling it. Even so we must believe that our souls (by virtue of the laws of spiritual nature) can only be moved by some reason of good or evil: and this even when no distinct knowledge can be extracted from our mental state, on account of a concourse of innumerable little perceptions which make us now joyful and now sad, or again of some other humour, and cause us to like one thing more than another without its being possible to say why. Plato, Aristotle and even Thomas Aquinas, Durand and other Schoolmen of the sounder sort reason on that question like the generality of men, and as unprejudiced people always have reasoned. They assume that freedom lies in the use of reason and the inclinations, which cause the choice or rejection of objects. But finally some rather too subtle philosophers have extracted from their alembic an inexplicable notion of choice independent of anything whatsoever, which is said to do wonders in solving all difficulties. But the notion is caught up at the outset in one of the greatest difficulties, by offending against the grand principle of reasoning which makes us always assume that nothing is done without some sufficient cause or reason. As the Schoolmen often forgot to apply this great principle, admitting certain prime occult qualities, one need not wonder if this fiction of vague indifference met with applause amongst them, and if even most worthy men have been imbued therewith. Our author, who is otherwise rid of many of

the errors of the ordinary Schoolmen, is still deluded by this fiction: but he is without doubt one of the most skilful of those who have supported it.

Si Pergama dextra

Defendi possent, etiam hac defensa fuissent.

He gives it the best possible turn, and only shows it on its good side. He knows how to strip spontaneity and reason of their advantages, transferring all these to vague indifference: only through this indifference is one active, resisting the passions, taking pleasure in one's choice, or being happy; it appears indeed that one would be miserable if some happy necessity should oblige us to choose aright. Our author had said admirable things on the origin and reasons of natural evils: he only had to apply the same principles to moral evil; indeed, he believes himself that moral evil becomes an evil through the physical evils that it causes or tends to cause. But somehow or other he thinks that it would be a degradation of God and men if they were to be made subject to reason; that thus they would all be rendered passive to it and would no longer be satisfied with themselves; in short that men would have nothing wherewith to oppose the misfortunes that come to them from without, if they had not within them this admirable privilege of rendering things good or tolerable by choosing them, and of changing all into gold by the touch of this wondrous faculty.

4. We will examine it in closer detail presently; but it will be well to profit beforehand by the excellent ideas of our author on the nature of things and on natural evils, particularly since there are some points in which we shall be able to go a little further: by this means also we shall gain a better understanding of the whole arrangement of his system. The first chapter contains the principles. The writer calls substance a being the idea of which does not involve the existence of another. I do not know if there are any such among created beings, by reason of the connexion existing between all things; and the example of a wax torch is not the example of a

substance, any more than that of a swarm of bees would be. But one may take the terms in an extended sense. He observes aptly that after all the changes of matter and after all the qualities of which it may be divested, there remain extension, mobility, divisibility and resistance. He explains also the nature of notions, and leaves it to be understood that *universals* indicate only the resemblances which exist between *individuals*; that we understand by *ideas* only that which is known through an immediate sensation, and that the rest is known to us only through relations with these ideas. But when he admits that we have no idea of God, of spirit, of substance, he does not appear to have observed sufficiently that we have immediate apperception of substance and of spirit in our apperception of ourselves, and that the idea of God is found in the idea of ourselves through a suppression of the limits of our perfections, as extension taken in an absolute sense is comprised in the idea of a globe. He is right also in asserting that our simple ideas at least are innate, and in rejecting the *Tabula rasa* of Aristotle and of Mr. Locke. But I cannot agree with him that our ideas have scarce any more relation to things than words uttered into the air or writings traced upon paper have to our ideas, and that the bearing of our sensations is arbitrary and *ex instituto*, like the signification of words. I have already indicated elsewhere why I am not in agreement with our Cartesians on that point.

5. For the purpose of advancing to the first Cause, the author seeks a criterion, a distinguishing mark of truth; and he finds it in the force whereby our inward assertions, when they are evident, compel the understanding to give them its consent. It is by such a process, he says, that we credit the senses. He points out that the distinguishing mark in the Cartesian scheme, to wit, a clear and distinct perception, has need of a new mark to indicate what is clear and distinct, and that the congruity or non-congruity of ideas (or rather of terms, as one spoke formerly) may still be deceptive, because

there are congruities real and apparent. He appears to recognize even that the inward force which constrains us to give our assent is still a matter for caution, and may come from deep-rooted prejudices. That is why he confesses that he who should furnish another criterion would have found something very advantageous to the human race. I have endeavoured to explain this criterion in a little *Discourse on Truth and Ideas*, published in 1684; and although I do not boast of having given therein a new discovery I hope that I have expounded things which were only confusedly recognized. I distinguish between truths of fact and truths of reason. Truths of fact can only be verified by confronting them with truths of reason, and by tracing them back to immediate perceptions within us, such as St. Augustine and M. Descartes very promptly acknowledged to be indubitable; that is to say, we cannot doubt that we think, nor indeed that we think this thing or that. But in order to judge whether our inward notions have any reality in things, and to pass from thoughts to objects, my opinion is that it is necessary to consider whether our perceptions are firmly connected among themselves and with others that we have had, in such fashion as to manifest the rules of mathematics and other truths of reason. In this case one must regard them as real; and I think that it is the only means of distinguishing them from imaginations, dreams and visions. Thus the truth of things outside us can be recognized only through the connexion of phenomena. The criterion of the truths of reason, or those which spring from conceptions, is found in an exact use of the rules of logic. As for ideas or notions, I call *real* all those the possibility of which is certain; and the *definitions* which do not mark this possibility are only *nominal*. Geometricians well versed in analysis are aware what difference there is in this respect between several properties by which some line or figure might be defined. Our gifted author has not gone so far, perhaps; one may see, however, from the account I have given of him

already, and from what follows, that he is by no means lacking in profundity or reflexion.

6. Thereafter he proceeds to examine whether motion, matter and space spring from themselves; and to that end he considers whether it is possible to conceive that they do not exist. He remarks upon this privilege of God, that as soon as it is assumed that he exists it must be admitted that he exists of necessity. This is a corollary to a remark which I made in the little discourse mentioned above, namely that as soon as one admits that God is possible, one must admit that he exists of necessity. Now, as soon as one admits that God exists, one admits that he is possible. Therefore as soon as one admits that God exists, one must admit that he exists of necessity. Now this privilege does not belong to the three things of which we have just spoken. The author believes also especially concerning motion, that it is not sufficient to say, with Mr. Hobbes, that the present movement comes from an anterior movement, and this one again from another, and so on to infinity. For, however far back you may go, you will not be one whit nearer to finding the reason which causes the presence of motion in matter. Therefore this reason must be outside the sequence; and even if there were an eternal motion, it would require an eternal motive power. So the rays of the sun, even though they were eternal with the sun, would nevertheless have their eternal cause in the sun. I am well pleased to recount these arguments of our gifted author, that it may be seen how important, according to him, is the principle of sufficient reason. For, if it is permitted to admit something for which it is acknowledged there is no reason, it will be easy for an atheist to overthrow this argument, by saying that it is not necessary that there be a sufficient reason for the existence of motion. I will not enter into the discussion of the reality and the eternity of space, for fear of straying too far from our subject. It is enough to state that the author believes that space can be annihilated by the divine power, but in entirety

and not in portions, and that we could exist alone with God even if there were neither space nor matter, since we do not contain within ourselves the notion of the existence of external things. He also puts forward the consideration that in the sensations of sounds, of odours and of savours the idea of space is not included. But whatever the opinion formed as to space, it suffices that there is a God, the cause of matter and of motion, and in short of all things. The author believes that we can reason about God, as one born blind would reason about light. But I hold that there is something more in us, for our light is a ray from God's light. After having spoken of some attributes of God, the author acknowledges that God acts for an end, which is the communication of his goodness, and that his works are ordered aright. Finally he concludes this chapter very properly, by saying that God in creating the world was at pains to give it the greatest harmony amongst things, the greatest comfort of beings endowed with reason, and the greatest compatibility in desires that an infinite power, wisdom and goodness combined could produce. He adds that, if some evil has remained notwithstanding, one must believe that these infinite divine perfections could not have (I would rather say ought not to have) taken it away.

7. Chapter II anatomizes evil, dividing it as we do into metaphysical, physical and moral. Metaphysical evil consists in imperfections, physical evil in suffering and other like troubles, and moral evil in sin. All these evils exist in God's work; Lucretius thence inferred that there is no providence, and he denied that the world can be an effect of divinity:

Naturam rerum divinitus esse creatam;

because there are so many faults in the nature of things,

quoniam tanta stat praedita culpa.

Others have admitted two principles, the one good, the other evil. There have also been people who thought the difficulty insurmountable, and among these our author appears to have had M. Bayle in mind. He hopes to

show in his work that it is not a Gordian knot, which needs to be cut; and he says rightly that the power, the wisdom and the goodness of God would not be infinite and perfect in their exercise if these evils had been banished. He begins with the evil of imperfection in Chapter III and observes, as St. Augustine does, that creatures are imperfect, since they are derived from nothingness, whereas God producing a perfect substance from his own essence would have made thereof a God. This gives him occasion for making a little digression against the Socinians. But someone will say, why did not God refrain from producing things, rather than make imperfect things? The author answers appositely that the abundance of the goodness of God is the cause. He wished to communicate himself at the expense of a certain fastidiousness which we assume in God, imagining that imperfections offend him. Thus he preferred that there should be the imperfect rather than nothing. But one might have added that God has produced indeed the most perfect whole that was possible, one wherewith he had full cause for satisfaction, the imperfections of the parts serving a greater perfection in the whole. Also the observation is made soon afterwards, that certain things might have been made better, but not without other new and *perhaps* greater disadvantages. This *perhaps* could have been omitted: for the author also states as a certainty, and rightly so, at the end of the chapter, *that it appertains to infinite goodness to choose the best*; and thus he was able to draw this conclusion a little earlier, that imperfect things will be added to those more perfect, so long as they do not preclude the existence of the more perfect in as great a number as possible. Thus bodies were created as well as spirits, since the one does not offer any obstacle to the other; and the creation of matter was not unworthy of the great God, as some heretics of old believed, attributing this work to a certain Demogorgon.

8. Let us now proceed to physical evil, which is treated of in Chapter IV. Our famous author, having observed that metaphysical evil, or imperfection, springs from nothingness, concludes that physical evil, or discomfort, springs from matter, or rather from its movement; for without movement matter would be useless. Moreover there must be contrariety in these movements; otherwise, if all went together in the same direction, there would be neither variety nor generation. But the movements that cause generations cause also corruptions, since from the variety of movements comes concussion between bodies, by which they are often dissipated and destroyed. The Author of Nature however, in order to render bodies more enduring, distributed them into *systems*, those which we know being composed of luminous and opaque balls, in a manner so excellent and so fitting for the display of that which they contain, and for arousing wonder thereat, that we can conceive of nothing more beautiful. But the crowning point of the work was the construction of animals, to the end that everywhere there should be creatures capable of cognition,

Ne regio foret ulla suis animalibus orba.

Our sagacious author believes that the air and even the purest aether have their denizens as well as the water and the earth. But supposing that there were places without animals, these places might have uses necessary for other places which are inhabited. So for example the mountains, which render the surface of our globe unequal and sometimes desert and barren, are of use for the production of rivers and of winds; and we have no cause to complain of sands and marshes, since there are so many places still remaining to be cultivated. Moreover, it must not be supposed that all is made for man alone: and the author is persuaded that there are not only pure spirits but also immortal animals of a nature akin to these spirits, that is, animals whose souls are united to an ethereal and incorruptible matter. But it is not the same with animals whose body is terrestrial, composed of tubes

and fluids which circulate therein, and whose motion is terminated by the breaking of the vessels. Thence the author is led to believe that the immortality granted to Adam, if he had been obedient, would not have been an effect of his nature, but of the grace of God.

9. Now it was necessary for the conservation of corruptible animals that they should have indications causing them to recognize a present danger, and giving them the inclination to avoid it. That is why what is about to cause a great injury must beforehand cause pain such as may force the animal to efforts capable of repulsing or shunning the cause of this discomfort, and of forestalling a greater evil. The dread of death helps also to cause its avoidance: for it if were not so ugly and if the dissolution of continuity were not so painful, very often animals would take no precautions against perishing, or allowing the parts of their body to perish, and the strongest would have difficulty in subsisting for a whole day.

God has also given hunger and thirst to animals, to compel them to feed and maintain themselves by replacing that which is used up and which disappears imperceptibly. These appetites are of use also to prompt them to work, in order to procure a nourishment meet for their constitution, and which may avail to invigorate them. It was even found necessary by the Author of things that one animal very often should serve as food for another. This hardly renders the victim more unhappy, since death caused by diseases is generally just as painful as a violent death, if not more so; and animals subject to being preyed upon by others, having neither foresight nor anxiety for the future, have a life no less tranquil when they are not in danger. It is the same with inundations, earthquakes, thunderbolts and other disorders, which brute beasts do not fear, and which men have ordinarily no cause to fear, since there are few that suffer thereby.

10. The Author of Nature has compensated for these evils and others, which happen only seldom, with a thousand advantages that are ordinary

and constant. Hunger and thirst augment the pleasure experienced in the taking of nourishment. Moderate work is an agreeable exercise of the animal's powers; and sleep is also agreeable in an altogether opposite way, restoring the forces through repose. But one of the pleasures most intense is that which prompts animals to propagation. God, having taken care to ensure that the species should be immortal, since the individual cannot be so here on earth, also willed that animals should have a great tenderness for their little ones, even to the point of endangering themselves for their preservation. From pain and from sensual pleasure spring fear, cupidity and the other passions that are ordinarily serviceable, although it may accidentally happen that they sometimes turn towards ill: one must say as much of poisons, epidemic diseases and other hurtful things, namely that these are indispensable consequences of a well-conceived system. As for ignorance and errors, it must be taken into account that the most perfect creatures are doubtless ignorant of much, and that knowledge is wont to be proportionate to needs. Nevertheless it is necessary that one be exposed to hazards which cannot be foreseen, and accidents of such kinds are inevitable. One must often be mistaken in one's judgement, because it is not always permitted to suspend it long enough for exact consideration. These disadvantages are inseparable from the system of things: for things must very often resemble one another in a certain situation, the one being taken for the other. But the inevitable errors are not the most usual, nor the most pernicious. Those which cause us the most harm are wont to arise through our fault; and consequently one would be wrong to make natural evils a pretext for taking one's own life, since one finds that those who have done so have generally been prompted to such action by voluntary evils.

11. After all, one finds that all these evils of which we have spoken come accidentally from good causes; and there is reason to infer concerning all we do not know, from all we do know, that one could not have done away

with them without falling into greater troubles. For the better understanding of this the author counsels us to picture the world as a great building. There must be not only apartments, halls, galleries, gardens, grottoes, but also the kitchen, the cellar, the poultry-yard, stables, drainage. Thus it would not have been proper to make only suns in the world, or to make an earth all of gold and of diamonds, but not habitable. If man had been all eye or all ear, he would not have been fitted for feeding himself. If God had made him without passions, he would have made him stupid; and if he had wished to make man free from error he would have had to deprive him of senses, or give him powers of sensation through some other means than organs, that is to say, there would not have been any man. Our learned author remarks here upon an idea which histories both sacred and profane appear to inculcate, namely that wild beasts, poisonous plants and other natures that are injurious to us have been armed against us by sin. But as he argues here only in accordance with the principles of reason he sets aside what Revelation can teach. He believes, however, that Adam would have been exempted from natural evils (if he had been obedient) only by virtue of divine grace and of a covenant made with God, and that Moses expressly indicates only about seven effects of the first sin. These effects are:

1. The revocation of the gracious gift of immortality.

2. The sterility of the earth, which was no longer to be fertile of itself, save in evil or useless herbs.

3. The rude toil one must exercise in order to gain sustenance.

4. The subjection of the woman to the will of the husband.

5. The pains of childbirth.

6. The enmity between man and the serpent.

7. The banishment of man from the place of delight wherein God had placed him.

But our author thinks that many of our evils spring from the necessity of matter, especially since the withdrawal of grace. Moreover, it seems to him that after our banishment immortality would be only a burden to us, and that it is perhaps more for our good than to punish us that the tree of life has become inaccessible to us. On one point or another one might have something to say in objection, but the body of the discourse by our author on the origin of evils is full of good and sound reflexions, which I have judged it advisable to turn to advantage. Now I must pass on to the subject of our controversy, that is, the explanation of the nature of freedom.

12. The learned author of this work on the origin of evil, proposing to explain the origin of moral evil in the fifth chapter, which makes up half of the whole book, considers that it is altogether different from that of physical evil, which lies in the inevitable imperfection of creatures. For, as we shall see presently, it appears to him that moral evil comes rather from that which he calls a perfection, which the creature has in common, according to him, with the Creator, that is to say, in the power of choosing without any motive and without any final or impelling cause. It is a very great paradox to assert that the greatest imperfection, namely sin, springs from perfection itself. But it is no less a paradox to present as a perfection the thing which is the least reasonable in the world, the advantage whereof would consist in being privileged against reason. And that, after all, rather than pointing out the source of the evil, would be to contend that it has none. For if the will makes its resolve without the existence of anything, either in the person who chooses or in the object which is chosen, to prompt it to the choice, there will be neither cause nor reason for this election; and as moral evil consists in the wrong choice, that is admitting that moral evil has no source at all. Thus in the rules of good metaphysics there would have to be no moral evil in Nature; and also for the same reason there would be no moral good either, and all morality would be destroyed. But we must listen to our

gifted author, from whom the subtlety of an opinion maintained by famous philosophers among the Schoolmen, and the adornments that he has added thereto himself by his wit and his eloquence, have hidden the great disadvantages contained therein. In setting forth the position reached in the controversy, he divides the writers into two parties. The one sort, he says, are content to say that the freedom of the will is exempt from outward constraint; and the other sort maintain that it is also exempt from inward necessity. But this exposition does not suffice, unless one distinguish the necessity that is absolute and contrary to morality from hypothetical necessity and moral necessity, as I have already explained in many places.

13. The first section of this chapter is to indicate the nature of choice. The author sets forth in the first place the opinion of those who believe that the will is prompted by the judgement of the understanding, or by anterior inclinations of the desires, to resolve upon the course that it adopts. But he confuses these authors with those who assert that the will is prompted to its resolution by an absolute necessity, and who maintain that the person who wills has no power over his volitions: that is, he confuses a Thomist with a Spinozist. He makes use of the admissions and the odious declarations of Mr. Hobbes and his like, to lay them to the charge of those who are infinitely far removed from them, and who take great care to refute them. He lays these things to their charge because they believe, as Mr. Hobbes believes, like everyone else (save for some doctors who are enveloped in their own subtleties), that the will is moved by the representation of good and evil. Thence he imputes to them the opinion that there is therefore no such thing as contingency, and that all is connected by an absolute necessity. That is a very speedy manner of reasoning; yet he adds also, that properly speaking there will be no evil will, since if there were, all one could object to therein would be the evil which it can cause. That, he says, is different from the common notion, since the world censures the wicked

not because they do harm, but because they do harm without necessity. He holds also that the wicked would be only unfortunate and by no means culpable; that there would be no difference between physical evil and moral evil, since man himself would not be the true cause of an action which he could not avoid; that evil-doers would not be either blamed or maltreated because they deserve it, but because that action may serve to turn people away from evil; again, for this reason only one would find fault with a rogue, but not with a sick man, that reproaches and threats can correct the one, and cannot cure the other. And further, according to this doctrine, chastisements would have no object save the prevention of future evil, without which the mere consideration of the evil already done would not be sufficient for punishment. Likewise gratitude would have as its sole aim that of procuring a fresh benefit, without which the mere consideration of the past benefit would not furnish a sufficient reason. Finally the author thinks that if this doctrine, which derives the resolution of the will from the representation of good and evil, were true, one must despair of human felicity, since it would not be in our power, and would depend upon things which are outside us. Now as there is no ground for hoping that things from outside will order themselves and agree together in accordance with our wishes, there will always lack something to us, and there will always be something too much. All these conclusions hold, according to him, against those also who think that the will makes its resolve in accordance with the final judgement of the understanding, an opinion which, as he considers, strips the will of its right and renders the soul quite passive. This accusation is also directed against countless serious writers, of accepted authority, who are here placed in the same class with Mr. Hobbes and Spinoza, and with some other discredited authors, whose doctrine is considered odious and insupportable. As for me, I do not require the will always to follow the judgement of the understanding, because I distinguish this judgement from

the motives that spring from insensible perceptions and inclinations. But I hold that the will always follows the most advantageous representation, whether distinct or confused, of the good or the evil resulting from reasons, passions and inclinations, although it may also find motives for suspending its judgement. But it is always upon motives that it acts.

14. It will be necessary to answer these objections to my opinion before proceeding to establish that of our author. The misapprehension of my opponents originates in their confusing a consequence which is necessary absolutely, whose contrary implies contradiction, with a consequence which is founded only upon truths of fitness, and nevertheless has its effect. To put it otherwise, there is a confusion between what depends upon the principle of contradiction, which makes necessary and indispensable truths, and what depends upon the principle of the sufficient reason, which applies also to contingent truths. I have already elsewhere stated this proposition, which is one of the most important in philosophy, pointing out that there are two great principles, namely, *that of identicals or of contradiction*, which states that of two contradictory enunciations the one is true and the other false, and *that of the sufficient reason*, which states that there is no true enunciation whose reason could not be seen by one possessing all the knowledge necessary for its complete understanding. Both principles must hold not only in necessary but also in contingent truths; and it is even necessary that that which has no sufficient reason should not exist. For one may say in a sense that these two principles are contained in the definition of the true and the false. Nevertheless, when in making the analysis of the truth submitted one sees it depending upon truths whose contrary implies contradiction, one may say that it is absolutely necessary. But when, while pressing the analysis to the furthest extent, one can never attain to such elements of the given truth, one must say that it is contingent, and that it originates from a prevailing reason which inclines without necessitating.

Once that is granted, it is seen how we can say with sundry famous philosophers and theologians, that the thinking substance is prompted to its resolution by the prevailing representation of good or of evil, and this certainly and infallibly, but not necessarily, that is, by reasons which incline it without necessitating it. That is why contingent futurities, foreseen both in themselves and through their reasons, remain contingent. God was led infallibly by his wisdom and by his goodness to create the world through his power, and to give it the best possible form; but he was not led thereto of necessity, and the whole took place without any diminution of his perfect and supreme wisdom. And I do not know if it would be easy, apart from the reflexions we have just entertained, to untie the Gordian knot of contingency and freedom.

15. This explanation dismisses all the objections of our gifted opponent. In the first place, it is seen that contingency exists together with freedom. Secondly, evil wills are evil not only because they do harm, but also because they are a source of harmful things, or of physical evils, a wicked spirit being, in the sphere of its activity, what the evil principle of the Manichaeans would be in the universe. Moreover, the author has observed (ch. 4, sect. 4, § 8) that divine wisdom has usually forbidden actions which would cause discomforts, that is to say, physical evils. It is agreed that he who causes evil by necessity is not culpable. But there is neither legislator nor lawyer who by this necessity means the force of the considerations of good or evil, real or apparent, that have prompted man to do ill: else anyone stealing a great sum of money or killing a powerful man in order to attain to high office would be less deserving of punishment than one who should steal a few halfpence for a mug of beer or wantonly kill his neighbour’s dog, since these latter were tempted less. But it is quite the opposite in the administration of justice which is authorized in the world: for the greater is the temptation to sin, the more does it need to be repressed by the fear of a

great chastisement. Besides, the greater the calculation evident in the design of an evil-doer, the more will it be found that the wickedness has been deliberate, and the more readily will one decide that it is great and deserving of punishment. Thus a too artful fraud causes the aggravating crime called *stellionate*, and a cheat becomes a forger when he has the cunning to sap the very foundations of our security in written documents. But one will have greater indulgence for a great passion, because it is nearer to madness. The Romans punished with the utmost severity the priests of the God Apis, when these had prostituted the chastity of a noble lady to a knight who loved her to distraction, making him pass as their god; while it was found enough to send the lover into exile. But if someone had done evil deeds without apparent reason and without appearance of passion the judge would be tempted to take him for a madman, especially if it proved that he was given to committing such extravagances often: this might tend towards reduction of the penalty, rather than supplying the true grounds of wickedness and punishment. So far removed are the principles of our opponents from the practice of the tribunals and from the general opinion of men.

16. Thirdly, the distinction between physical evil and moral evil will still remain, although there be this in common between them, that they have their reasons and causes. And why manufacture new difficulties for oneself concerning the origin of moral evil, since the principle followed in the solution of those which natural evils have raised suffices also to account for voluntary evils? That is to say, it suffices to show that one could not have prevented men from being prone to errors, without changing the constitution of the best of systems or without employing miracles at every turn. It is true that sin makes up a large portion of human wretchedness, and even the largest; but that does not prevent one from being able to say that men are wicked and deserving of punishment: else one must needs say that

the actual sins of the non-regenerate are excusable, because they spring from the first cause of our wretchedness, which is original sin. Fourthly, to say that the soul becomes passive and that man is not the true cause of sin, if he is prompted to his voluntary actions by their objects, as our author asserts in many passages, and particularly ch. 5, sect. 1, sub-sect. 3, § 18, is to create for oneself new senses for terms. When the ancients spoke of that which is εφ' ἡμιν, or when we speak of that which depends upon us, of spontaneity, of the inward principle of our actions, we do not exclude the representation of external things; for these representations are in our souls, they are a portion of the modifications of this active principle which is within us. No agent is capable of acting without being *predisposed* to what the action demands; and the reasons or inclinations derived from good or evil are the dispositions that enable the soul to decide between various courses. One will have it that the will is alone active and supreme, and one is wont to imagine it to be like a queen seated on her throne, whose minister of state is the understanding, while the passions are her courtiers or favourite ladies, who by their influence often prevail over the counsel of her ministers. One will have it that the understanding speaks only at this queen's order; that she can vacillate between the arguments of the minister and the suggestions of the favourites, even rejecting both, making them keep silence or speak, and giving them audience or not as seems good to her. But it is a personification or mythology somewhat ill-conceived. If the will is to judge, or take cognizance of the reasons and inclinations which the understanding or the senses offer it, it will need another understanding in itself, to understand what it is offered. The truth is that the soul, or the thinking substance, understands the reasons and feels the inclinations, and decides according to the predominance of the representations modifying its active force, in order to shape the action. I have no need here to apply my system of Pre-established Harmony, which shows our independence to the

best advantage and frees us from the physical influence of objects. For what I have just said is sufficient to answer the objection. Our author, even though he admits with people in general this physical influence of objects upon us, observes nevertheless with much perspicacity that the body or the objects of the senses do not even give us our ideas, much less the active force of our soul, and that they serve only to draw out that which is within us. This is much in the spirit of M. Descartes' belief that the soul, not being able to give force to the body, gives it at least some direction. It is a mean between one side and the other, between physical influence and Pre-established Harmony.

17. Fifthly, the objection is made that, according to my opinion, sin would neither be censured nor punished because of its deserts, but because the censure and the chastisement serve to prevent it another time; whereas men demand something more, namely, satisfaction for the crime, even though it should serve neither for amendment nor for example. So do men with reason demand that true gratitude should come from a true recognition of the past benefit, and not from the interested aim of extorting a fresh benefit. This objection contains noble and sound considerations, but it does not strike at me. I require a man to be virtuous, grateful, just, not only from the motive of interest, of hope or of fear, but also of the pleasure that he should find in good actions: else one has not yet reached the degree of virtue that one must endeavour to attain. That is what one means by saying that justice and virtue must be loved for their own sake; and it is also what I explained in justifying 'disinterested love', shortly before the opening of the controversy which caused so much stir. Likewise I consider that wickedness is all the greater when its practice becomes a pleasure, as when a highwayman, after having killed men because they resist, or because he fears their vengeance, finally grows cruel and takes pleasure in killing them, and even in making them suffer beforehand. Such a degree of wickedness is

taken to be diabolical, even though the man affected with it finds in this execrable indulgence a stronger reason for his homicides than he had when he killed simply under the influence of hope or of fear. I have also observed in answering the difficulties of M. Bayle that, according to the celebrated Conringius, justice which punishes by means of *medicinal* penalties, so to speak, that is, in order to correct the criminal or at least to provide an example for others, might exist in the opinion of those who do away with the freedom that is exempt from necessity. True retributive justice, on the other hand, going beyond the medicinal, assumes something more, namely, intelligence and freedom in him who sins, because the harmony of things demands a satisfaction, or evil in the form of suffering, to make the mind feel its error after the voluntary active evil whereto it has consented. Mr. Hobbes also, who does away with freedom, has rejected retributive justice, as do the Socinians, drawing on themselves the condemnation of our theologians; although the writers of the Socinian party are wont to exaggerate the idea of freedom.

18. Sixthly, the objection is finally made that men cannot hope for felicity if the will can only be actuated by the representation of good and evil. But this objection seems to me completely null and void, and I think it would be hard to guess how any tolerable interpretation was ever put upon it. Moreover, the line of reasoning adopted to prove it is of a most astounding nature: it is that our felicity depends upon external things, if it is true that it depends upon the representation of good or evil. It is therefore not in our own power, so it is said, for we have no ground for hoping that outward things will arrange themselves for our pleasure. This argument is halting from every aspect. *There is no force in the inference: one might grant the conclusion: the argument may be retorted upon the author*. Let us begin with the retort, which is easy. For are men any happier or more independent of the accidents of fortune upon this argument, or because they

are credited with the advantage of choosing without reason? Have they less bodily suffering? Have they less tendency toward true or apparent goods, less fear of true or imaginary evils? Are they any less enslaved by sensual pleasure, by ambition, by avarice? less apprehensive? less envious? Yes, our gifted author will say; I will prove it by a method of counting or assessment. I would rather he had proved it by experience; but let us see this proof by counting. Suppose that by my choice, which enables me to give goodness-for-me to that which I choose, I give to the object chosen six degrees of goodness, when previously there were two degrees of evil in my condition; I shall become happy all at once, and with perfect ease, for I should have four degrees surplus, or net good. Doubtless that is all very well; but unfortunately it is impossible. For what possibility is there of giving these six degrees of goodness to the object? To that end we must needs have the power to change our taste, or the things, as we please. That would be almost as if I could say to lead, Thou shalt be gold, and make it so; to the pebble, Thou shalt be diamond; or at the least, Thou shalt look like it. Or it would be like the common explanation of the Mosaical passage which seems to say that the desert manna assumed any taste the Israelites desired to give to it. They only had to say to their homerful, Thou shalt be a capon, thou shalt be a partridge. But if I am free to give these six degrees of goodness to the object, am I not permitted to give it more goodness? I think that I am. But if that is so, why shall we not give to the object all the goodness conceivable? Why shall we not even go as far as twenty-four carats of goodness? By this means behold us completely happy, despite the accidents of fortune; it may blow, hail or snow, and we shall not mind: by means of this splendid secret we shall be always shielded against fortuitous events. The author agrees (in this first section of the fifth chapter, sub-sect. 3, § 12) that this power overcomes all the natural appetites and cannot be overcome by any of them; and he regards it (§§ 20, 21, 22) as the soundest

foundation for happiness. Indeed, since there is nothing capable of limiting a power so indeterminate as that of choosing without any reason, and of giving goodness to the object through the choice, either this goodness must exceed infinitely that which the natural appetites seek in objects, these appetites and objects being limited while this power is independent or at the least this goodness, given by the will to the chosen object, must be arbitrary and of such a kind as the will desires. For whence would one derive the reason for limits if the object is possible, if it is within reach of him who wills, and if the will can give it the goodness it desires to give, independently of reality and of appearances? It seems to me that may suffice to overthrow a hypothesis so precarious, which contains something of a fairy-tale kind, *optantis ista sunt, non invenientis*. It therefore remains only too true that this handsome fiction cannot render us more immune from evils. And we shall see presently that when men place themselves above certain desires or certain aversions they do so through other desires, which always have their foundation in the representation of good and evil. I said also 'that one might grant the conclusion of the argument', which states that our happiness does not depend absolutely upon ourselves, at least in the present state of human life: for who would question the fact that we are liable to meet a thousand accidents which human prudence cannot evade? How, for example, can I avoid being swallowed up, together with a town where I take up my abode, by an earthquake, if such is the order of things? But finally I can also deny the inference in the argument, which states that if the will is only actuated by the representation of good and evil our happiness does not depend upon ourselves. The inference would be valid if there were no God, if everything were ruled by brute causes; but God's ordinance is that for the attainment of happiness it suffices that one be virtuous. Thus, if the soul follows reason and the orders that God has given

it, it is assured of its happiness, even though one may not find a sufficiency thereof in this life.

19. Having thus endeavoured to point out the disadvantages of my hypothesis, our gifted author sets forth the advantages of his own. He believes that it alone is capable of saving our freedom, that all our felicity rests therein, that it increases our goods and lessens our evils, and that an agent possessing this power is so much the more complete. These advantages have almost all been already disproved. We have shown that for the securing of our freedom it is enough that the representations of goods and of evils, and other inward or outward dispositions, should incline us without constraining us. Moreover one does not see how pure indifference can contribute to felicity; on the contrary, the more indifferent one is, the more insensitive and the less capable of enjoying what is good will one prove to be. Besides the hypothesis proves too much. For if an indifferent power could give itself the consciousness of good it could also give itself the most perfect happiness, as has been already shown. And it is manifest that there is nothing which would set limits to that power, since limits would withdraw it from its pure indifference, whence, so our author alleges, it only emerges of itself, or rather wherein it has never been. Finally one does not see wherein the perfection of pure indifference lies: on the contrary, there is nothing more imperfect; it would render knowledge and goodness futile, and would reduce everything to chance, with no rules, and no measures that could be taken. There are, however, still some advantages adduced by our author which have not been discussed. He considers then that by this power alone are we the true cause to which our actions can be imputed, since otherwise we should be under the compulsion of external objects; likewise that by this power alone can one ascribe to oneself the merit of one's own felicity, and feel pleased with oneself. But the exact opposite is the case: for when one happens upon the action through an

absolutely indifferent movement, and not as a result of one's good or bad qualities, is it not just as though one were to happen upon it blindly by chance or hazard? Why then should one boast of a good action, or why should one be censured for an evil one, if the thanks or blame redounds to fortune or hazard? I think that one is more worthy of praise when one owes the action to one's good qualities, and the more culpable in proportion as one has been impelled to it by one's evil qualities. To attempt to assess actions without weighing the qualities whence they spring is to talk at random and to put an imaginary indefinable something in the place of causes. Thus, if this chance or this indefinable something were the cause of our actions, to the exclusion of our natural or acquired qualities, of our inclinations, of our habits, it would not be possible to set one's hopes upon anything depending upon the resolve of others, since it would not be possible to fix something indefinite, or to conjecture into what roadstead the uncertain weather of an extravagant indifference will drive the vessel of the will.

20. But setting aside advantages and disadvantages, let us see how our learned author will justify the hypothesis from which he promises us so much good. He imagines that it is only God and the free creatures who are active in the true sense, and that in order to be active one must be determined by oneself only. Now that which is determined by itself must not be determined by objects, and consequently the free substance, in so far as it is free, must be indifferent with regard to objects, and emerge from this indifference only by its own choice, which shall render the object pleasing to it. But almost all the stages of this argument have their stumbling-blocks. Not only the free creatures, but also all the other substances and natures composed of substances, are active. Beasts are not free, and yet all the same they have active souls, unless one assume, with the Cartesians, that they are mere machines. Moreover, it is not necessary that in order to be active one

should be determined only by oneself, since a thing may receive direction without receiving force. So it is that the horse is controlled by the rider and the vessel is steered by the helm; and M. Descartes' belief was that our body, having force in itself, receives only some direction from the soul. Thus an active thing may receive from outside some determination or direction, capable of changing that direction which it would take of itself. Finally, even though an active substance is determined only by itself, it does not follow that it is not moved by objects: for it is the representation of the object within it which contributes towards the determination. Now the representation does not come from without, and consequently there is complete spontaneity. Objects do not act upon intelligent substances as efficient and physical causes, but as final and moral causes. When God acts in accordance with his wisdom, he is guided by the ideas of the possibles which are his objects, but which have no reality outside him before their actual creation. Thus this kind of spiritual and moral motion is not contrary to the activity of the substance, nor to the spontaneity of its action. Finally, even though free power were not determined by the objects, it can never be indifferent to the action when it is on the point of acting, since the action must have its origin in a disposition to act: otherwise one will do anything from anything, *quidvis ex quovis*, and there will be nothing too absurd for us to imagine. But this disposition will have already broken the charm of mere indifference, and if the soul gives itself this disposition there must needs be another predisposition for this act of giving it. Consequently, however far back one may go, one will never meet with a mere indifference in the soul towards the actions which it is to perform. It is true that these dispositions incline it without constraining it. They relate usually to the objects; but there are some, notwithstanding, which arise variously *a subjecto* or from the soul itself, and which bring it about that one object is

more acceptable than the other, or that the same is more acceptable at one time than at another.

21. Our author continually assures us that his hypothesis is true, and he undertakes to show that this indifferent power is indeed found in God, and even that it must be attributed to him of necessity. For (he says) nothing is to God either good or bad in creatures. He has no natural appetite, to be satisfied by the enjoyment of anything outside him. He is therefore absolutely indifferent to all external things, since by them he can neither be helped nor hindered; and he must determine himself and create as it were an appetite in making his choice. And having once chosen, he will wish to abide by his choice, just as if he had been prompted thereto by a natural inclination. Thus will the divine will be the cause of goodness in beings. That is to say, there will be goodness in the objects, not by their nature, but by the will of God: whereas if that will be excluded neither good nor evil can exist in things. It is difficult to imagine how writers of merit could have been misled by so strange an opinion, for the reason which appears to be advanced here has not the slightest force. It seems to me as though an attempt is being made to justify this opinion by the consideration that all creatures have their whole being from God, so that they cannot act upon him or determine him. But this is clearly an instance of self-deception. When we say that an intelligent substance is actuated by the goodness of its object, we do not assert that this object is necessarily a being existing outside the substance, and it is enough for us that it be conceivable: for its representation acts in the substance, or rather the substance acts upon itself, in so far as it is disposed and influenced by this representation. With God, it is plain that his understanding contains the ideas of all possible things, and that is how everything is in him in a transcendent manner. These ideas represent to him the good and evil, the perfection and imperfection, the order and disorder, the congruity and incongruity of possibles; and his

superabundant goodness makes him choose the most advantageous. God therefore determines himself by himself; his will acts by virtue of his goodness, but it is particularized and directed in action by understanding filled with wisdom. And since his understanding is perfect, since his thoughts are always clear, his inclinations always good, he never fails to do the best; whereas we may be deceived by the mere semblances of truth and goodness. But how is it possible for it to be said that there is no good or evil in the ideas before the operation of God's will? Does the will of God form the ideas which are in his understanding? I dare not ascribe to our learned author so strange a sentiment, which would confuse understanding and will, and would subvert the current use of our notions. Now if ideas are independent of will, the perfection or imperfection which is represented in them will be independent also. Indeed, is it by the will of God, for example, or is it not rather by the nature of numbers, that certain numbers allow more than others of various exact divisions? that some are more fitted than others for forming battalions, composing polygons and other regular figures? that the number six has the advantage of being the least of all the numbers that are called perfect? that in a plane six equal circles may touch a seventh? that of all equal bodies, the sphere has the least surface? that certain lines are incommensurable, and consequently ill-adapted for harmony? Do we not see that all these advantages or disadvantages spring from the idea of the thing, and that the contrary would imply contradiction? Can it be thought that the pain and discomfort of sentient creatures, and above all the happiness and unhappiness of intelligent substances, are a matter of indifference to God? And what shall be said of his justice? Is it also something arbitrary, and would he have acted wisely and justly if he had resolved to condemn the innocent? I know that there have been writers so ill-advised as to maintain an opinion so dangerous and so liable to overthrow religion. But I am assured that our illustrious author is far from

holding it. Nevertheless, it seems as though this hypothesis tends in that direction, if there is nothing in objects save what is indifferent to the divine will before its choice. It is true that God has need of nothing; but the author has himself shown clearly that God's goodness, and not his need, prompted him to produce creatures. There was therefore in him a reason anterior to the resolution; and, as I have said so many times, it was neither by chance nor without cause, nor even by necessity, that God created this world, but rather as a result of his inclination, which always prompts him to the best. Thus it is surprising that our author should assert here (ch. 5, sect. 1, sub-sect. 4, § 5) that there is no reason which could have induced God, absolutely perfect and happy in himself, to create anything outside him, although, according to the author's previous declarations (ch. 1, sect. 3, §§ 8, 9), God acts for an end, and his aim is to communicate his goodness. It was therefore not altogether a matter of indifference to him whether he should create or not create, and creation is notwithstanding a free act. Nor was it a matter of indifference to him either, whether he should create one world rather than another; a perpetual chaos, or a completely ordered system. Thus the qualities of objects, included in their ideas, formed the reason for God's choice.

22. Our author, having already spoken so admirably about the beauty and fittingness of the works of God, has tried to search out phrases that would reconcile them with his hypothesis, which appears to deprive God of all consideration for the good or the advantage of creatures. The indifference of God prevails (he says) only in his first elections, but as soon as God has chosen something he has virtually chosen, at the same time, all that which is of necessity connected therewith. There were innumerable possible men equally perfect: the election of some from among them is purely arbitrary (in the judgement of our author). But God, once having chosen them, could not have willed in them anything contrary to human nature. Up to this point

the author's words are consistent with his hypothesis; but those that follow go further. He advances the proposition that when God resolved to produce certain creatures he resolved at the same time, by virtue of his infinite goodness, to give them every possible advantage. Nothing, indeed, could be so reasonable, but also nothing could be so contrary to the hypothesis he has put forward, and he does right to overthrow it, rather than prolong the existence of anything so charged with incongruities incompatible with the goodness and wisdom of God. Here is the way to see plainly that this hypothesis cannot harmonize with what has just been said. The first question will be: Will God create something or not, and wherefore? The author has answered that he will create something in order to communicate his goodness. It is therefore no matter of indifference to him whether he shall create or not. Next the question is asked: Will God create such and such a thing, and wherefore? One must needs answer (to speak consistently) that the same goodness makes him choose the best, and indeed the author falls back on that subsequently. But, following his own hypothesis, he answers that God will create such a thing, but that there is no *wherefore*, because God is absolutely indifferent towards creatures, who have their goodness only from his choice. It is true that our author varies somewhat on this point, for he says here (ch. 5, sect. 5, sub-sect. 4, § 12) that God is indifferent to the choice between men of equal perfection, or between equally perfect kinds of rational creatures. Thus, according to this form of expression, he would choose rather the more perfect kind: and as kinds that are of equal perfection harmonize more or less with others, God will choose those that agree best together; there will therefore be no pure and absolute indifference, and the author thus comes back to my principles. But let us speak, as he speaks, in accordance with his hypothesis, and let us assume with him that God chooses certain creatures even though he be absolutely indifferent towards them. He will then just as soon choose creatures that are

irregular, ill-shapen, mischievous, unhappy, chaos everlasting, monsters everywhere, scoundrels as sole inhabitants of the earth, devils filling the whole universe, all this rather than excellent systems, shapely forms, upright persons, good angels! No, the author will say, God, when once he had resolved to create men, resolved at the same time to give them all the advantages possible in the world, and it is the same with regard to creatures of other kinds. I answer, that if this advantage were connected of necessity with their nature, the author would be speaking in accordance with his hypothesis. That not being so, however, he must admit that God's resolve to give every possible advantage to men arises from a new election independent of that one which prompted God to make men. But whence comes this new election? Does it also come from mere indifference? If such is the case, nothing prompts God to seek the good of men, and if he sometimes comes to do it, it will be merely by accident. But the author maintains that God was prompted to the choice by his goodness; therefore the good and ill of creatures is no matter of indifference to him, and there are in him primary choices to which the goodness of the object prompts him. He chooses not only to create men, but also to create men as happy as it is possible to be in this system. After that not the least vestige of mere indifference will be left, for we can reason concerning the entire world just as we have reasoned concerning the human race. God resolved to create a world, but he was bound by his goodness at the same time to make choice of such a world as should contain the greatest possible amount of order, regularity, virtue, happiness. For I can see no excuse for saying that whereas God was prompted by his goodness to make the men he has resolved to create as perfect as is possible within this system, he had not the same good intention towards the whole universe. There we have come back again to the goodness of the objects; and pure indifference, where God would act without cause, is altogether destroyed by the very procedure of our gifted

author, with whom the force of truth, once the heart of the matter was reached, prevailed over a speculative hypothesis, which cannot admit of any application to the reality of things.

23. Since, therefore, nothing is altogether indifferent to God, who knows all degrees, all effects, all relations of things, and who penetrates at one and the same time all their possible connexions, let us see whether at least the ignorance and insensibility of man can make him absolutely indifferent in his choice. The author regales us with this pure indifference as with a handsome present. Here are the proofs of it which he gives: (1) We feel it within us. (2) We have experience within ourselves of its marks and its properties. (3) We can show that other causes which might determine our will are insufficient. As for the first point, he asserts that in feeling freedom within us we feel within us at the same time pure indifference. But I do not agree that we feel such indifference, or that this alleged feeling follows upon that of freedom. We feel usually within us something which inclines us to our choice. At times it happens, however, that we cannot account for all our dispositions. If we give our mind to the question, we shall recognize that the constitution of our body and of bodies in our environment, the present or previous temper of our soul, together with countless small things included under these comprehensive headings, may contribute towards our greater or lesser predilection for certain objects, and the variation of our opinions from one time to another. At the same time we shall recognize that none would attribute this to mere indifference, or to some indefinable force of the soul which has the same effect upon objects as colours are said to have upon the chameleon. Thus the author has no cause here to appeal to the judgement of the people: he does so, saying that in many things the people reason better than the philosophers. It is true that certain philosophers have been misled by chimeras, and it would seem that mere indifference is numbered among chimerical notions. But when someone

maintains that a thing does not exist because the common herd does not perceive it, here the populace cannot be regarded as a good judge, being, as it is, only guided by the senses. Many people think that air is nothing when it is not stirred by the wind. The majority do not know of imperceptible bodies, the fluid which causes weight or elasticity, magnetic matter, to say nothing of atoms and other indivisible substances. Do we say then that these things are not because the common herd does not know of them? If so, we shall be able to say also that the soul acts sometimes without any disposition or inclination contributing towards the production of its act, because there are many dispositions and inclinations which are not sufficiently perceived by the common herd, for lack of attention and thought. Secondly, as to the marks of the power in question, I have already refuted the claim advanced for it, that it possesses the advantage of making one active, the real cause of one's action, and subject to responsibility and morality: these are not genuine marks of its existence. Here is one the author adduces, which is not genuine either, namely, that we have within us a power of resisting natural appetites, that is to say of resisting not only the senses, but also the reason. But I have already stated this fact: one resists natural appetites through other natural appetites. One sometimes endures inconveniences, and is happy to do so; but that is on account of some hope or of some satisfaction which is combined with the ill and exceeds it: either one anticipates good from it, or one finds good in it. The author asserts that it is through that power to transform appearances which he has introduced on the scene, that we render agreeable what at first displeased us. But who cannot see that the true reason is, that application and attention to the object and custom change our disposition and consequently our natural appetites? Once we become used to a rather high degree of cold or heat, it no longer incommodes us as it formerly did, and yet no one would ascribe this effect to our power of choice. Time is needed, for instance, to bring about that

hardening, or rather that callosity, which enables the hands of certain workmen to resist a degree of heat that would burn our hands. The populace, whom the author invokes, guess correctly the cause of this effect, although they sometimes apply it in a laughable manner. Two serving-maids being close to the fire in the kitchen, one who has burnt herself says to the other: Oh, my dear, who will be able to endure the fire of purgatory? The other answers: Don't be absurd, my good woman, one grows used to everything.

24. But (the author will say) this wonderful power which causes us to be indifferent to everything, or inclined towards everything, simply at our own free will, prevails over reason itself. And this is his third proof, namely, that one cannot sufficiently explain our actions without having recourse to this power. One sees numbers of people despising the entreaties of their friends, the counsels of their neighbours, the reproaches of their conscience, discomforts, tortures, death, the wrath of God, hell itself, for the sake of running after follies which have no claim to be good or tolerable, save as being freely chosen by such people. All is well in this argument, with the exception of the last words only. For when one takes an actual instance one will find that there were reasons or causes which led the man to his choice, and that there are very strong bonds to fasten him thereto. A love-affair, for example, will never have arisen from mere indifference: inclination or passion will have played its part; but habit and stubbornness will cause certain natures to face ruin rather than separation from the beloved. Here is another example cited by the author: an atheist, a man like Lucilio Vanini (that is what many people call him, whereas he himself adopts the magnificent name of Giulio Cesare Vanini in his works), will suffer a preposterous martyrdom for his chimera rather than renounce his impiety. The author does not name Vanini; and the truth is that this man repudiated his wrong opinions, until he was convicted of having published atheistical

dogmas and acted as an apostle of atheism. When he was asked whether there was a God, he plucked some grass, saying:

Et levis est cespes qui probet esse Deum.

But since the Attorney General to the Parliament of Toulouse desired to cause annoyance to the First President (so it is said), to whom Vanini was granted considerable access, teaching his children philosophy, if indeed he was not altogether in the service of that magistrate, the inquisition was carried through rigorously. Vanini, seeing that there was no chance of pardon, declared himself, when at the point of death, for what he was, an atheist; and there was nothing very extraordinary in that. But supposing there were an atheist who gave himself up for torture, vanity might be in his case a strong enough motive, as in that of the Gymnosophist, Calanus, and of the Sophist who, according to Lucian's account, was burnt to death of his own will. But the author thinks that that very vanity, that stubbornness, those other wild intentions of persons who otherwise seem to have quite good sense, cannot be explained by the appetites that arise from the representation of good and evil, and that they compel us to have recourse to that transcendent power which transforms good into evil, and evil into good, and the indifferent into good or into evil. But we do not need to go so far, and the causes of our errors are only too visible. Indeed, we can make these transformations, but it is not as with the Fairies, by a mere act of this magic power, but by obscuring and suppressing in one's mind the representations of good or bad qualities which are naturally attached to certain objects, and by contemplating only such representations as conform to our taste or our prejudices; or again, because one attaches to the objects, by dint of thinking of them, certain qualities which are connected with them only accidentally or through our habitual contemplation of them. For example, all my life long I detest a certain kind of good food, because in my childhood I found in it something distasteful, which made a strong

impression upon me. On the other hand, a certain natural defect will be pleasing to me, because it will revive within me to some extent the thought of a person I used to esteem or love. A young man will have been delighted by the applause which has been showered upon him after some successful public action; the impression of this great pleasure will have made him remarkably sensitive to reputation; he will think day and night of nothing save what nourishes this passion, and that will cause him to scorn death itself in order to attain his end. For although he may know very well that he will not feel what is said of him after his death, the representation he makes of it for himself beforehand creates a strong impression on his mind. And there are always motives of the same kind in actions which appear most useless and absurd to those who do not enter into these motives. In a word, a strong or oft-repeated impression may alter considerably our organs, our imagination, our memory, and even our reasoning. It happens that a man, by dint of having often related something untrue, which he has perhaps invented, finally comes to believe in it himself. And as one often represents to oneself something pleasing, one makes it easy to imagine, and one thinks it also easy to put into effect, whence it comes that one persuades oneself easily of what one wishes.

Et qui amant ipsi sibi somnia fingunt.

25. Errors are therefore, absolutely speaking, never voluntary, although the will very often contributes towards them indirectly, owing to the pleasure one takes in giving oneself up to certain thoughts, or owing to the aversion one feels for others. Beautiful print in a book will help towards making it persuasive to the reader. The air and manner of a speaker will win the audience for him. One will be inclined to despise doctrines coming from a man one despises or hates, or from another who resembles him in some point that strikes us. I have already said why one is readily disposed to believe what is advantageous or agreeable, and I have known people who at

first had changed their religion for worldly considerations, but who have been persuaded (and well persuaded) afterwards that they had taken the right course. One sees also that stubbornness is not simply wrong choice persevering, but also a disposition to persevere therein, which is due to some good supposed to be inherent in the choice, or some evil imagined as arising from a change. The first choice has perchance been made in mere levity, but the intention to abide by it springs from certain stronger reasons or impressions. There are even some writers on ethics who lay it down that one ought to abide by one's choice so as not to be inconstant or appear so. Yet perseverance is wrong when one despises the warnings of reason, especially when the subject is important enough to be examined carefully; but when the thought of change is unpleasant, one readily averts one's attention from it, and that is the way which most frequently leads one to stubbornness. The author wished to connect stubbornness with his so-called pure indifference. He might then have taken into account that to make us cling to a choice there would be need of more than the mere choice itself or a pure indifference, especially if this choice has been made lightly, and all the more lightly in proportion to the indifference shown. In such a case we shall be readily inclined to reverse the choice, unless vanity, habit, interest or some other motive makes us persevere therein. It must not be supposed either that vengeance pleases without cause. Persons of intense feeling ponder upon it day and night, and it is hard for them to efface the impression of the wrong or the affront they have sustained. They picture for themselves a very great pleasure in being freed from the thought of scorn which comes upon them every moment, and which causes some to find vengeance sweeter than life itself.

Quis vindicta bonum vita jucundius ipsa.

The author would wish to persuade us that usually, when our desire or our aversion is for some object which does not sufficiently deserve it, we

have given to it the surplus of good or evil which has affected us, through the alleged power of choice which makes things appear good or evil as we wish. One has had two degrees of natural evil, one gives oneself six degrees of artificial good through the power that can choose without cause. Thus one will have four degrees of net good (ch. 5, sect. 2, § 7). If that could be carried out it would take us far, as I have already said here. The author even thinks that ambition, avarice, the gambling mania and other frivolous passions derive all their force from this power (ch. 5, sect. 5, sub-sect. 6). But there are besides so many false appearances in things, so many imaginations capable of enlarging or diminishing objects, so many unjustified connexions in our arguments, that there is no need of this little Fairy, that is, of this inward power operating as it were by enchantment, to whom the author attributes all these disorders. Indeed, I have already said repeatedly that when we resolve upon some course contrary to acknowledged reason, we are prompted to it by another reason stronger to outward appearance, such as, for instance, is the pleasure of appearing independent and of performing an extraordinary action. There was in days past at the Court of Osnabrück a tutor to the pages, who, like a second Mucius Scaevola, held out his arm into the flame and looked like getting a gangrene, in order to show that the strength of his mind was greater than a very acute pain. Few people will follow his example; and I do not even know if a writer could easily be found who, having once affirmed the existence of a power capable of choosing without cause, or even contrary to reason, would be willing to prove his case by his own example, in renouncing some good benefice or some high office, simply in order to display this superiority of will over reason. But I am sure at the least that an intelligent man would not do so. He would be presently aware that someone would nullify his sacrifice by pointing out to him that he had simply imitated Heliodorus, Bishop of Larissa. That man (so it is said) held his

book on Theagenes and Chariclea dearer than his bishopric; and such a thing may easily happen when a man has resources enabling him to dispense with his office and when he is sensitive to reputation. Thus every day people are found ready to sacrifice their advantages to their caprices, that is to say, actual goods to the mere semblance of them.

26. If I wished to follow step by step the arguments of our gifted author, which often come back to matters previously considered in our inquiry, usually however with some elegant and well-phrased addition, I should be obliged to proceed too far; but I hope that I shall be able to avoid doing so, having, as I think, sufficiently met all his reasons. The best thing is that with him practice usually corrects and amends theory. After having advanced the hypothesis, in the second section of this fifth chapter, that we approach God through the capacity to choose without reason, and that this power being of the noblest kind its exercise is the most capable of making one happy, things in the highest degree paradoxical, since it is reason which leads us to imitate God and our happiness lies in following reason: after that, I say, the author provides an excellent corrective, for he says rightly (§ 5) that in order to be happy we must adapt our choice to things, since things are scarcely prone to adapt themselves to us, and that this is in effect adapting oneself to the divine will. Doubtless that is well said, but it implies besides that our will must be guided as far as possible by the reality of the objects, and by true representations of good and evil. Consequently also the motives of good and evil are not opposed to freedom, and the power of choosing without cause, far from ministering to our happiness, will be useless and even highly prejudicial. Thus it is happily the case that this power nowhere exists, and that it is ‘a being of reasoning reason’, as some Schoolmen call the fictions that are not even possible. As for me, I should have preferred to call them ‘beings of non-reasoning reason’. Also I think that the third section (on wrong elections) may pass, since it says that one

must not choose things that are impossible, inconsistent, harmful, contrary to the divine will, or already taken by others. Moreover, the author remarks appositely that by prejudicing the happiness of others needlessly one offends the divine will, which desires that all be happy as far as it is possible. I will say as much of the fourth section, where there is mention of the source of wrong elections, which are error or ignorance, negligence, fickleness in changing too readily, stubbornness in not changing in time, and bad habits; finally there is the importunity of the appetites, which often drive us inopportunely towards external things. The fifth section is designed to reconcile evil elections or sins with the power and goodness of God; and this section, as it is diffuse, is divided into sub-sections. The author has cumbered himself needlessly with a great objection: for he asserts that without a power to choose that is altogether indifferent in the choice there would be no sin. Now it was very easy for God to refuse to creatures a power so irrational. It was sufficient for them to be actuated by the representations of goods and evils; it was therefore easy, according to the author's hypothesis, for God to prevent sin. To extricate himself from this difficulty, he has no other resource than to state that if this power were removed from things the world would be nothing but a purely passive machine. But that is the very thing which I have disproved. If this power were missing in the world (as in fact it is), one would hardly complain of the fact. Souls will be well content with the representations of goods and evils for the making of their choice, and the world will remain as beautiful as it is. The author comes back to what he had already put forward here, that without this power there would be no happiness. But I have given a sufficient answer to that, and there is not the slightest probability in this assertion and in certain other paradoxes he puts forward here to support his principal paradox.

27. He makes a small digression on prayer (sub-sect. 4), saying that those who pray to God hope for some change in the order of nature; but it seems as though, according to his opinion, they are mistaken. In reality, men will be content if their prayers are heard, without troubling themselves as to whether the course of nature is changed in their favour, or not. Indeed, if they receive succour from good angels there will be no change in the general order of things. Also this opinion of our author is a very reasonable one, that there is a system of spiritual substances, just as there is of corporeal substances, and that the spiritual have communication with one another, even as bodies do. God employs the ministry of angels in his rule of mankind, without any detriment to the order of nature. Nevertheless, it is easier to put forward theories on these matters than to explain them, unless one have recourse to my system of Harmony. But the author goes somewhat further. He believes that the mission of the Holy Spirit was a great miracle in the beginning, but that now his operations within us are natural. I leave it to him to explain his opinion, and to settle the matter with other theologians. Yet I observe that he finds the natural efficacy of prayer in the power it has of making the soul better, of overcoming the passions, and of winning for oneself a certain degree of new grace. I can say almost the same things on my hypothesis, which represents the will as acting only in accordance with motives; and I am immune from the difficulties in which the author has become involved over his power of choosing without cause. He is in great embarrassment also with regard to the foreknowledge of God. For if the soul is perfectly indifferent in its choice how is it possible to foresee this choice? and what sufficient reason will one be able to find for the knowledge of a thing, if there is no reason for its existence? The author puts off to some other occasion the solution of this difficulty, which would require (according to him) an entire work. For the rest, he sometimes speaks pertinently, and in conformity with my principles, on the subject of moral

evil. He says, for example (sub-sect. 6), that vices and crimes do not detract from the beauty of the universe, but rather add to it, just as certain dissonances would offend the ear by their harshness if they were heard quite alone, and yet in combination they render the harmony more pleasing. He also points out divers goods involved in evils, for instance, the usefulness of prodigality in the rich and avarice in the poor; indeed it serves to make the arts flourish. We must also bear in mind that we are not to judge the universe by the small size of our globe and of all that is known to us. For the stains and defects in it may be found as useful for enhancing the beauty of the rest as patches, which have nothing beautiful in themselves, are by the fair sex found adapted to embellish the whole face, although they disfigure the part they cover. Cotta, in Cicero's book, had compared providence, in its granting of reason to men, to a physician who allows wine to a patient, notwithstanding that he foresees the misuse which will be made thereof by the patient, at the expense of his life. The author replies that providence does what wisdom and goodness require, and that the good which accrues is greater than the evil. If God had not given reason to man there would have been no man at all, and God would be like a physician who killed someone in order to prevent his falling ill. One may add that it is not reason which is harmful in itself, but the absence of reason; and when reason is ill employed we reason well about means, but not adequately about an end, or about that bad end we have proposed to ourselves. Thus it is always for lack of reason that one does an evil deed. The author also puts forward the objection made by Epicurus in the book by Lactantius on the wrath of God. The terms of the objection are more or less as follows. Either God wishes to banish evils and cannot contrive to do so, in which case he would be weak; or he can abolish them, and will not, which would be a sign of malignity in him; or again he lacks power and also will, which would make him appear both weak and jealous; or finally he can and will, but in

this case it will be asked why he then does not banish evil, if he exists? The author replies that God cannot banish evil, that he does not wish to either, and that notwithstanding he is neither malicious nor weak. I should have preferred to say that he can banish evil, but that he does not wish to do so absolutely, and rightly so, because he would then banish good at the same time, and he would banish more good than evil. Finally our author, having finished his learned work, adds an Appendix, in which he speaks of the Divine Laws. He fittingly divides these laws into natural and positive. He observes that the particular laws of the nature of animals must give way to the general laws of bodies, that God is not in reality angered when his laws are violated, but that order demanded that he who sins should bring an evil upon himself, and that he who does violence to others should suffer violence in his turn. But he believes that the positive laws of God rather indicate and forecast the evil than cause its infliction. And that gives him occasion to speak of the eternal damnation of the wicked, which no longer serves either for correction or example, and which nevertheless satisfies the retributive justice of God, although the wicked bring their unhappiness upon themselves. He suspects, however, that these punishments of the wicked bring some advantage to virtuous people. He is doubtful also whether it is not better to be damned than to be nothing: for it might be that the damned are fools, capable of clinging to their state of misery owing to a certain perversity of mind which, he maintains, makes them congratulate themselves on their false judgements in the midst of their misery, and take pleasure in finding fault with the will of God. For every day one sees peevish, malicious, envious people who enjoy the thought of their ills, and seek to bring affliction upon themselves. These ideas are not worthy of contempt, and I have sometimes had the like myself, but I am far from passing final judgement on them. I related, in § 271 of the essays written to oppose M. Bayle, the fable of the Devil’s refusal of the pardon a hermit

offers him on God's behalf. Baron André Taifel, an Austrian nobleman, Knight of the Court of Ferdinand Archduke of Austria who became the second emperor of that name, alluding to his name (which appears to mean Devil in German) assumed as his emblem a devil or satyr, with this Spanish motto, *Mas perdido, y menos arrepentido*, the more lost, the less repentant, which indicates a hopeless passion from which one cannot free oneself. This motto was afterwards repeated by the Spanish Count of Villamediana when he was said to be in love with the Queen. Coming to the question why evil often happens to the good and good to the wicked, our illustrious author thinks that it has been sufficiently answered, and that hardly any doubt remains on that point. He observes nevertheless that one may often doubt whether good people who endure affliction have not been made good by their very misfortune, and whether the fortunate wicked have not perhaps been spoilt by prosperity. He adds that we are often bad judges, when it is a question of recognizing not only a virtuous man, but also a happy man. One often honours a hypocrite, and one despises another whose solid virtue is without pretence. We are poor judges of happiness also, and often felicity is hidden from sight under the rags of a contented poor man, while it is sought in vain in the palaces of certain of the great. Finally the author observes, that the greatest felicity here on earth lies in the hope of future happiness, and thus it may be said that to the wicked nothing happens save what is of service for correction or chastisement, and to the good nothing save what ministers to their greater good. These conclusions entirely correspond to my opinion, and one can say nothing more appropriate for the conclusion of this work.

CAUSA DEI ASSERTA PER JUSTITIAM EJUS

cum caeteris ejus perfectionibus cunctisque actionibus conciliatam.

The original edition of the Theodicy contained a fourth appendix under this title. It presented in scholastic Latin a formal summary of the positive doctrine expressed by the French treatise. It satisfied the academic requirements of its day, but would not, presumably, be of interest to many modern readers, and is consequently omitted here.

Monadology (1714)

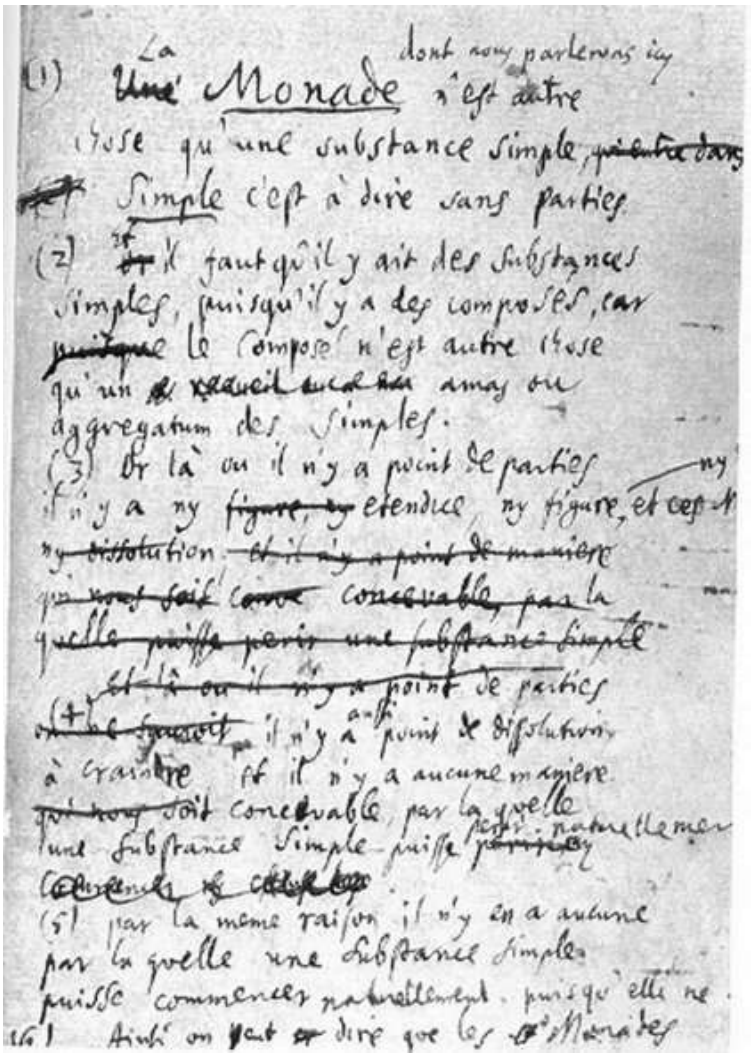
Translated by Frederic Henry Hedge, 1867

One of the most important works of Leibniz' later philosophy, *Monadology* (1714) is a short text concerning metaphysics of simple substances, or monads (from Ancient Greek μονάς 'unity' — a term used in philosophy to refer to a most basic or original substance). During his last stay in Vienna from 1712 to September 1714, Leibniz completed this treatise, which was intended as a concise exposition of his philosophy. There are three original manuscripts of the text: the first written by Leibniz and glossed with corrections and two further emended copies with some corrections appearing in one but not the other. Leibniz himself inserted references to the paragraphs of his *Theodicy* (a justification of God), directing the interested reader to the larger work for more details.

Leibniz allows just one type of element in the building of the universe. The unique element has been 'given the general name monad or entelechy' and is described as 'a simple substance'. Leibniz explains that monads are 'simple' and therefore 'indivisible'. Relying on the Greek etymology of the word *entelechie*, he posits quantitative differences in perfection between monads which leads to a hierarchical ordering. The basic order is three-tiered: (1) entelechies or created monads, (2) souls or entelechies with perception and memory and (3) spirits or rational souls. God is also explained as a simple substance, but it is the only one necessary and without a body attached. Monads, he argues, perceive others "with varying degrees of clarity, except for God, who perceives all monads with utter clarity". God could take any and all perspectives, knowing of both potentiality and actuality.

At the time, atoms were proposed to be the smallest division of matter. Within Leibniz' theory, however, substances are not technically real, so monads are not the smallest part of matter, rather they are the only things which are, in fact, real. To Leibniz, space and time were an illusion, and likewise substance itself. The only things that could be called real were utterly simple beings of psychic activity "endowed with perception and appetite."

Leibniz extends his theory of Monads to support his argument that we live in the best of all possible worlds. He uses his basis of perception, but not interaction among monads to explain that all monads must draw their essence from one ultimate monad. He goes on to claim that this ultimate monad would be God because a monad is a "simple substance" and God is simplest of all substances — He cannot be broken down any further.



The first manuscript page of 'Monadology'

MONADOLOGY

1. THE MONAD, of which we shall here speak, is merely a simple substance entering into those which are compound; simple, that is to say, without parts.

2. And there must be simple substances, since there are compounds; for the compound is only a collection or aggregate of simples.

3. Where there are no parts, neither extension, nor figure, nor divisibility is possible; and these Monads are the veritable Atoms of Nature — in one word, the Elements of things.

4. There is thus no danger of dissolution, and there is no conceivable way in which a simple substance can perish naturally.

5. For the same reason, there is no way in which a simple substance can begin naturally, since it could not be formed by composition.

6. Therefore we may say that the Monads can neither begin nor end in any other way than all at once; that is to say, they cannot begin except by creation, nor end except by annihilation; whereas that which is compounded, begins and ends by parts.

7. There is also no intelligible way in which a Monad can be altered or changed in its interior by any other creature, since it would be impossible to transpose anything in it, or to conceive in it any internal movement — any movement excited, directed, augmented or diminished within, such as may take place in compound bodies, where there is change of parts. The Monads have no windows through which anything can enter or go forth. It would be impossible for any accidents to detach themselves and go forth from the substances, as did formerly the Sensible Species of the Schoolmen.

Accordingly, neither substance nor accident can enter a Monad from without.

8. Nevertheless Monads must have qualities — otherwise they would not even be entities; and if simple substances did not differ in their qualities, there would be no means by which we could become aware of the changes of things, since all that is in compound bodies is derived from simple ingredients, and Monads, being without qualities, would be indistinguishable one from another, seeing also they do not differ in quantity. Consequently, a *plenum* being supposed, each place could in any movement receive only the just equivalent of what it had had before, and one state of things would be indistinguishable from another.

9. Moreover, each Monad must differ from every other, for there are never two beings in nature perfectly alike, and in which it is impossible to find an internal difference, or one founded on some intrinsic denomination.

10. I take it for granted, furthermore, that every created being is subject to change — consequently the created Monad; and likewise that this change is continual in each.

11. It follows, from what we have now said, that the natural changes of Monads proceed from an internal principle, since no external cause can influence the interior.

12. But, besides the principle of change, there must also be a detail of changes, embracing, so to speak, the specification and the variety of the simple substances.

13. This detail must involve multitude in unity or in simplicity: for as all natural changes proceed by degrees, something changes and something remains, and consequently there must be in the simple substance a plurality of affections and relations, although there are no parts.

14. This shifting state, which involves and represents multitude in unity, or in the simple substance, is nothing else than what we call Perception,

which must be carefully distinguished from *apperception*, or consciousness, as will appear in the sequel. Here it is that the Cartesians have especially failed, making no account of those perceptions of which we are not conscious. It is this that has led them to suppose that spirits are the only Monads, and that there are no souls of brutes or other Entelechies. It is owing to this that they have vulgarly confounded protracted torpor with actual death, and have fallen in with the scholastic prejudice, which believes in souls entirely separate. Hence, also, ill affected minds have been confirmed in the opinion that the soul is mortal.

15. The action of the internal principle which causes the change, or the passage from one perception to another, may be called Appetition. It is true, the desire cannot always completely attain to every perception to which it tends, but it always attains to something thereof, and arrives at new perceptions.

16. We experience in ourselves the fact of multitude in the simple substance, when we find that the least thought of which we are conscious includes a variety in its object. Accordingly, all who admit that the soul is a simple substance, are bound to admit this multitude in the Monad, and Mr. Boyle should not have found any difficulty in this admission, as he has done in his dictionary — Art. Rorarius.

17. Besides, it must be confessed that Perception and its consequences are inexplicable by mechanical causes — that is to say, by figures and motions. If we imagine a machine so constructed as to produce thought, sensation, perception, we may conceive it magnified — the same proportions being preserved — to such an extent that one might enter it like a mill. This being supposed, we should find in it on inspection only pieces which impel each other, but nothing which can explain a perception. It is in the simple substance, therefore — not in the compound, or in machinery — that we must look for that phenomenon; and in the simple substance we find

nothing else — nothing, that is, but perceptions and their changes. Therein also, and therein only, consist all the internal acts of simple substances.

18. We might give the name of Entelechies to all simple substances or created Monads, inasmuch as there is in them a certain completeness (perfection), (ἔχουσι τό ἐντελες). There is a sufficiency (αύτάρκεια) which makes them the sources of their own internal actions, and, as it were, incorporeal automata.

19. If we choose to give the name of soul to all that has perceptions and desires, in the general sense which I have just indicated, all simple substances or created Monads may be called souls. But as sentiment is something more than simple perception, I am willing that the general name of Monads and Entelechies shall suffice for those simple substances which have nothing but perceptions, and that the term souls shall be confined to those whose perceptions are more distinct, and accompanied by memory.

20. For we experience in ourselves a state in which we remember nothing, and have no distinct perception, as when we are in a swoon or in a profound and dreamless sleep. In this state the soul does not differ sensibly from a simple Monad; but since this state is not permanent, and since the soul delivers herself from it, she is something more.

21. And it does not by any means follow, in that case, that the simple substance is without perception: that, indeed, is impossible, for the reasons given above; for it cannot perish, neither can it subsist without affection of some kind, which is nothing else than its perception. But where there is a great number of minute perceptions, and where nothing is distinct, one is stunned, as when we turn round and round in continual succession in the same direction; whence arises a vertigo, which may cause us to faint, and which prevents us from distinguishing anything. And possibly death may produce this state for a time in animals.

22. And as every present condition of a simple substance is a natural consequence of its antecedent condition, so its present is big with its future.

23. Then, as on awaking from a state of stupor, we become conscious of our perceptions, we must have had perceptions, although unconscious of them, immediately before awaking. For each perception can have no other natural origin but an antecedent perception, as every motion must be derived from one which preceded it.

24. Thus it appears that if there were no distinction — no relief, so to speak — no enhanced flavor in our perceptions, we should continue forever in a state of stupor; and this is the condition of the naked Monad.

25. And so we see that nature has given to animals enhanced perceptions, by the care which she has taken to furnish them with organs which collect many rays of light and many undulations of air, increasing their efficacy by their union. There is something approaching to this in odor, in taste, in touch, and perhaps in a multitude of other senses of which we have no knowledge. I shall presently explain how that which passes in the soul represents that which takes place in the organs.

26. Memory gives to the soul a kind of consecutive action which imitates reason, but must be distinguished from it. We observe that animals, having a perception of something which strikes them, and of which they have previously had a similar perception, expect, through the representation of their memory, the recurrence of that which was associated with it in their previous perception, and incline to the same feelings which they then had. For example, when we show dogs the cane, they remember the pain which it caused them, and whine and run.

27. And the lively imagination, which strikes and excites them, arises from the magnitude or the multitude of their previous perceptions. For often a powerful impression produces suddenly the effect of long habit, or of moderate perceptions often repeated.

28. In men as in brutes, the consecutiveness of their perceptions is due to the principle of memory — like empirics in medicine, who have only practice without theory. And we are mere empirics in three-fourths of our acts. For example, when we expect that the sun will rise tomorrow, we judge so empirically, because it has always risen hitherto. Only the astronomer judges by an act of reason.

29. But the cognition of necessary and eternal truths is that which distinguishes us from mere animals. It is this which gives us Reason and Science, and raises us to the knowledge of ourselves and of God: and it is this in us which we call a reasonable soul or spirit.

30. It is also by the cognition of necessary truths, and by their abstractions, that we rise to acts of reflection, which give us the idea of that which, calls itself "I," and which lead us to consider that this or that is in us. And thus, while thinking of ourselves, we think of Being, of substance, simple or compound, of the immaterial, and of God himself. We conceive that that which in us is limited, is in him without limit. And these reflective acts furnish the principal objects of our reasonings.

31. Our reasonings are founded on two great principles, that of "*Contradiction*," by virtue of which we judge that to be false which involves contradiction, and that to be true which is opposed to, or which contradicts the false.

32. And that of the "*Sufficient Reason*," by virtue of which we judge that no fact can be real or existent, no statement true, unless there be a sufficient reason why it is thus, and not otherwise, although these reasons very often cannot be known to us.

33. There are also two sorts of truths — those of reasoning and those of fact. Truths of reasoning are necessary, and their opposite is impossible; those of fact are contingent, and their opposite is possible. When a truth is necessary, we may discover the reason of it by analysis, resolving it into

simpler ideas and truths, until we arrive at those which are ultimate [*Primitifs*].

34. It is thus that mathematicians by analysis reduce speculative theorems and practical canons to definitions, axioms and postulates.

35. And finally, there are simple ideas of which no definition can be given; there are also axioms and postulates, — in one word, *ultimate* [*Primitifs*] *principles*, which cannot and need not be proved. And these are "Identical Propositions," of which the opposite contains an express contradiction.

36. But there must also be a sufficient reason for truths contingent, or truths of fact — that is, for the series of things diffused through the universe of creatures — or else the process of resolving into particular reasons might run into a detail without bounds, on account of the immense variety of the things of nature, and of the infinite division of bodies. There is an infinity of figures and of movements, present and past, which enter into the efficient cause of my present writing; and there is an infinity of minute inclinations and dispositions of my soul, present and past, which enter into the final cause of it.

37. And as all this detail only involves other anterior or more detailed contingencies, each one of which again requires a similar analysis in order to account for it, we have made no advance, and the sufficient or final reason must be outside of the series of this detail of contingencies [i.e. accidental causes], endless as it may be.

38. And thus the final reason of things must be found in a necessary Substance, in which the detail of changes exists eminently as their source. And this is that which we call God.

39. Now this Substance being a sufficient reason of all this detail, which also is everywhere linked together, *there is but one God, and this God suffices*.

40. We may also conclude that this supreme Substance, which is Only [*unique*], Universal, and Necessary — having nothing outside of it which is independent of it, and being a simple series of possible beings — must be incapable of limits, and must contain as much of reality as is possible.

41. Whence it follows that God is perfect, perfection being nothing but the magnitude of positive reality taken exactly, setting aside the limits or bounds in that which is limited. And there, where there are no bounds, that is to say, in God, perfection is absolutely infinite.

42. It follows also that the creatures have their perfections from the influence of God, but they have their imperfections from their proper nature, incapable of existing without bounds; for it is by this that they are distinguished from God.

43. It is true, moreover, that God is not only the source of existences, but also of essences, so far as real, or of that which is real in the possible; because the divine understanding is the region of eternal truths, or of the ideas on which they depend, and without Him there would be nothing real in the possibilities, and not only nothing existing, but also nothing possible.

44. At the same time, if there be a reality in the essences or possibilities, or in the eternal truths, this reality must be founded in something existing and actual, consequently in the existence of the necessary Being, in whom essence includes existence, or with whom it is sufficient to be possible in order to be actual.

45. Thus God alone (or the necessary Being) possesses this privilege, that he must exist if possible; and since nothing can hinder the possibility of that which includes no bounds, no negation, and consequently no contradiction, that alone is sufficient to establish the existence of God *a priori*. We have likewise proved it by the reality of eternal truths. But we have also just proved it *a posteriori* by showing that, since contingent

beings exist, they can have their ultimate and sufficient reason only in some necessary Being, who contains the reason of his existence in himself.

46. Nevertheless, we must not suppose, with some, that eternal verities, being dependent upon God, are arbitrary, and depend upon his will, as Des Cartes, and afterward M. Poiret, appear to have conceived. This is true only of contingent truths, the principle of which is fitness, or the choice of the best; whereas necessary truths depend solely on His understanding, and are its internal object.

47. Thus God alone is the primitive Unity, or the simple original substance of which all the created or derived Monads are the products; and they are generated, so to speak, by continual fulgurations of the Divinity, from moment to moment, bounded by the receptivity of the creature, of whose existence limitation is an essential condition.

48. In God is *Power*, which is the source of all; then Knowledge, which contains the detail of Ideas; and, finally, Will, which generates changes or products according to the principle of optimism. And this answers to what, in created Monads, constitutes the subject or the basis, the perceptive and the appetitive faculty. But in God these attributes are absolutely infinite or perfect, and in the created Monads, or in the Entelechies (or *perfectihabiis*, as Hermolaus Barbaras translates this word), they are only imitations according to the measure of their perfection.

49. The creature is said to act externally, in so far as it possesses perfection, and to suffer from ‘another (creature) so far as it is imperfect. So we ascribe action to the Monad, so far as it has distinct perceptions, and passion, so far as its perceptions are confused.

50. And one creature is more perfect than another, in this: that we find in it that which serves to account *a priori* for what passes in the other; and it is therefore said to act upon the other.

51. But in simple substances this is merely an ideal influence of one Monad upon another, which can pass into effect only by the intervention of God, inasmuch as in the ideas of God one Monad has a right to demand that God, in regulating the rest from the commencement of things, shall have regard to it; for since a created Monad can have no physical influence on the interior of another, it is only by this means that one can be dependent on another.

52. And hence it is that actions and passions in creatures are mutual; for God, comparing two simple substances, finds reasons in each which oblige him to accommodate the one to the other. Consequently that which is active in one view, is passive in another — active so far as what we clearly discern in it serves to account for that which takes place in another, and passive so far as the reason of that which passes in it is found in that which is clearly discerned in another.

53. Now, as in the ideas of God there is an infinity of possible worlds, and as only one can exist, there must be a sufficient reason for the choice of God, which determines him to one rather than another.

54. And this reason can be no other than fitness, derived from the different degrees of perfection which these worlds contain, each possible world having a claim to exist according to the measure of perfection which it enfolds.

55. And this is the cause of the existence of that Best, which the wisdom of God discerns, which his goodness chooses, and his power effects.

56. And this connection, or this accommodation of all created thin- M5h, and of each to all, implies in each simple substance relations which express all the rest. Each, accordingly, is a living and perpetual mirror of the universe.

57. And as the same city viewed from different sides appears quite different, and is perspectively multiplied, so, in the infinite multitude of

simple substances, there are given, as it were, so many different worlds which yet are only the perspectives of a single one, according to the different points of view of each Monad.

58. And this is the way to obtain the greatest possible variety with the greatest possible order — that is to say, the way to obtain the greatest possible perfection.

59. Thus this hypothesis (which I may venture to pronounce demonstrated) is the only one which properly exhibits the greatness of God. And this Mr. Boyle acknowledges, when in his dictionary (Art. Rorarius) he objects to it. He is even disposed to think that I attribute too much to God, that I ascribe to him impossibilities; but he can allege no reason for the impossibility of this universal harmony, by which each substance expresses exactly the perfections of all the rest through its relations with them.

60. We see, moreover, in that which I have just stated, the *a priori* reasons why things could not be other than they are. God, in ordering the whole, has respect to each part, and specifically to each Monad, whose nature being representative, is by nothing restrained from representing the whole of things, although, it is true, this representation must needs be confused, as it regards the detail of the universe, and can be distinct only in relation to a small part of things, that is, in relation to those which are nearest, or whose relations to any given Monad are greatest. Otherwise each Monad would be a divinity. The Monads are limited, not in the object, but in the mode of their knowledge of the object. They all tend confusedly to the infinite, to the whole; but they are limited and distinguished by the degrees of distinctness in their perceptions.

61. And compounds symbolize in this with simples. For since the world is a *plenum*, and all matter connected, and as in a *plenum* every movement has some effect on distant bodies, in proportion to their distance, so that each body is affected not only by those in actual contact with it, and feels in

some way all that happens to them, but also through their means is affected by others in contact with those by which it is immediately touched — it follows that this communication extends to any distance. Consequently, each body feels all that passes in the universe, so that he who sees all, may read in each that which passes everywhere else, and even that which has been and shall be, discerning in the present that which is removed in time as well as in space. "Συμπνόιει Πάντα," says Hippocrates. But each soul can read in itself only that which is distinctly represented in it. It cannot unfold its laws at once, for they reach into the infinite.

62. Thus, though every created Monad represents the entire universe, it represents more distinctly the particular body to which it belongs, and whose Entelechy it is: and as this body expresses the entire universe, through the connection of all matter in a *plenum*, the soul represents also the entire universe in representing that body which especially belongs to it.

63. The body belonging to a Monad, which is its Entelechy or soul, constitutes, with its Entelechy, what may be termed a living (thing), and, with its soul, what may be called an animal. And the body of a living being, or of an animal, is always organic; for every Monad, being a mirror of the universe, according to its fashion, and the universe being arranged with perfect order, there must be the same order in the representative — that is, in the perceptions of the soul, and consequently of the body according to which the universe is represented in it.

64. Thus each organic living body is a species of divine machine, or a natural automaton, infinitely surpassing all artificial automata. A machine made by human art is not a machine in all its parts. For example, the tooth of a brass wheel has parts or fragments which are not artificial to us; they have nothing which marks the machine in their relation to the use for which the wheel is designed; but natural machines — that is, living bodies — are still machines in their minutest parts, *ad infinitum*. This makes the

difference between nature and art, that is to say, between the Divine art and ours.

65. And the author of nature was able to exercise this divine and infinitely wonderful art, inasmuch as every portion of nature is not only infinitely divisible, as the ancients knew, but is actually subdivided without end — each part into parts, of which each has its own movement. Otherwise, it would be impossible that each portion of matter should express the universe.

66. Whence it appears that there is a world of creatures, of living (things), of animals, of Entelechies, of souls, in the minutest portion of matter.

67. Every particle of matter may be conceived as a garden of plants, or as a pond full of fishes. But each branch of each plant, each member of each animal, each drop of their humors, is in turn another such garden or pond.

68. And although the earth and the air embraced between the plants in the garden, or the water between the fishes of the pond, are not themselves plant or fish, they nevertheless contain such, but mostly too minute for our perception.

69. So there is no uncultured spot, no barrenness, no death in the universe — no chaos, no confusion, except in appearance, as it might seem in a pond at a distance, in which one should see a confused motion and swarming, so to speak, of the fishes of the pond, without distinguishing the fishes themselves.

70. We see, then, that each living body has a governing Entelechy, which in animals is the soul of the animal. But the members of this living body are full of other living bodies — plants, animals — each of which has its Entelechy, or regent soul.

71. We must not, however, suppose — as some who misapprehended my thought have done — that each soul has a mass or portion of matter proper

to itself, or forever united to it, and that it consequently possesses other inferior living existences, destined forever to its service. For all bodies are in a perpetual flux, like rivers. Their particles are continually coming and going.

72. Thus the soul does not change its body except by degrees. It is never deprived at once of all its organs. There are often metamorphoses in animals, but never Metempsychosis — no transmigration of souls. Neither are there souls entirely separated (from bodies), nor genii without bodies. God alone is wholly without body.

73. For which reason, also, there is never complete generation nor perfect death — strictly considered — consisting in the separation of the soul. That which we call generation, is development and accretion; and that which we call death, is envelopment and diminution.

74. Philosophers have been much troubled about the origin of forms, of Entelechies, or souls. But at the present day, when, by accurate investigations of plants, insects and animals, they have become aware that the organic bodies of nature are never produced from chaos or from putrefaction, but always from seed, in which undoubtedly there had been a *preformation;* it has been inferred that not only the organic body existed in that seed before conception, but also a soul in that body — in one word, the animal itself — and that, by the act of conception, this animal is merely disposed to a grand transformation, to become an animal of another species. We even see something approaching this, outside of generation, as when worms become flies, or when caterpillars become butterflies.

75. Those animals, of which some are advanced to a higher grade, by means of conception, may be called *spermatic;* but those among them which remain in their kind — that is to say, the greater portion — are born, multiply, and are destroyed, like the larger animals, and only a small number of the elect among them, pass to a grander theatre.

76. But this is only half the truth. I have concluded that if the animal does not begin to be in the order of nature, it also does not cease to be in the order of nature, and that not only there is no generation, but no entire destruction — no death, strictly considered. And these *a posteriori* conclusions, drawn from experience, accord perfectly with my principles deduced *a priori*, as stated above.

77. Thus we may Bay, not only that the soul (mirror of an indestructible universe) is indestructible, but also the animal itself, although its machine may often perish in part, and put off or put on organic spoils.

78. These principles have furnished me with a natural explanation of the union, or rather the conformity between the soul and the organized body. The soul follows its proper laws, and the body likewise follows those which are proper to it, and they meet in virtue of the preëstablished harmony which exists between all substances, as representations of one and the same universe.

79. Souls act according to the laws of final causes, by appetitions, means and ends; bodies act according to the laws of efficient causes, or the laws of motion. And the two kingdoms, that of efficient causes and that of final causes, harmonize with each other.

80. Des Cartes perceived that souls communicate no force to bodies, because the quantity of force in matter is always the same. Nevertheless, he believed that souls might change the direction of bodies. But this was because the world was at that time ignorant of the law of nature, which requires the conservation of the same total direction in matter. Had he known this, he would have hit upon my system of preëstablished harmony.

81. According to this system, bodies act as if there were no souls, and souls act as if there were no bodies; and yet both act as though the one influenced the other.

82. As to spirits, or rational souls, although I find that at bottom the same principle which I have stated — namely, that animals and souls begin with the world and end only with the world — holds with regard to all animals and living things, yet there is this peculiarity in rational animals, that although their spermatic animalcules, as such, have only ordinary or sensitive souls, yet as soon as those of them which are *elected*, so to speak, arrive by the act of conception at human nature, their sensitive souls are elevated to the rank of reason and to the prerogative of spirits.

83. Among other differences which distinguish spirits from ordinary souls, some of which have already been indicated, there is also this: that souls in general are living mirrors, or images of the universe of creatures, but spirits are, furthermore, images of Divinity itself, or of the Author of Nature, capable of cognizing the system of the universe, and of imitating something of it by architectonic experiments, each spirit being, as it were, a little divinity in its own department.

84. Hence spirits are able to enter into a kind of fellowship with God. In their view he is not merely what an inventor is to his machine (as God is in relation to other creatures), but also what a prince is to his subjects, and even what a father is to his children.

85. Whence it is easy to conclude that the assembly of all spirits must constitute the City of God — that is to say, the most perfect state possible, under the most perfect of monarchs.

86. This City of God, this truly universal monarchy, is a moral world within the natural; and it is the most exalted and the most divine among the works of God. It is in this that the glory of God most truly consists, which glory would be wanting if his greatness and his goodness were not recognized and admired by spirits. It is in relation to this Divine City that he possesses, properly speaking, the attribute of *goodness*, whereas his wisdom and his power are everywhere manifest.

87. As we have established above, a perfect harmony between the two natural kingdoms — the one of efficient causes, the other of final causes — so it behooves us to notice here also a still further harmony between the physical kingdom of nature and the moral kingdom of grace — that is to say, between God considered as the architect of the machine of the universe, and God considered as monarch of the divine City of Spirits.

88. This harmony makes all things conduce to grace by natural methods. This globe, for example, must be destroyed and repaired by natural means, at such seasons as the government of spirits may require, for the chastisement of some and the recompense of others.

89. We may say, furthermore, that God as architect contains entirely God as legislator, and that accordingly sins must carry their punishment with them in the order of nature, by virtue even of the mechanical structure of things, and that good deeds in like manner will bring their recompense, through their connection with bodies, although this cannot, and ought not always to, take place on the spot.

90. Finally, under this perfect government, there will be no good deed without its recompense, and no evil deed without its punishment, and all must redound to the advantage of the good — that is to say, of those who are not malcontents — in this great commonwealth, who confide in Providence after having done their duty, and who worthily love and imitate the Author of all good, pleasing themselves with the contemplation of his perfections, following the nature of pure and genuine Love, which makes us blest in the happiness of the loved. In this spirit, the wise and good labor for that which appears to be conformed to the divine will, presumptive or antecedent, contented the while with nil that God brings to pass by his secret will, consequent and decisive, — knowing that if we were sufficiently acquainted with the order of the universe we should find that it surpasses all the wishes of the wisest, and that it could not be made better

than it is, not only for all in general, but for ourselves in particular, if we arc attached, as is fitting, to the Author of All, not only as the architect and efficient cause of our being, but also as our master and the final cause, who should be the whole aim of our volition, and who alone can make us blest.

The Philosophical Works of Leibnitz (1890)

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Portrait of Leibniz by an unknown artist, Lower Saxony State and University Library, 1711

ON THE PHILOSOPHY OF DESCARTES. 1679-1680.

[From the French.]

AS TO THE Philosophy of Descartes, of which you ask my opinion, I do not hesitate to say absolutely that it leads to atheism.

It is true that there are some things very suspicious to me who have considered it attentively: for example, these two passages, that final cause ought not to be considered in physics, and that matter takes successively all the forms of which it is capable. There is an admirable passage in the *Phaedo* of Plato which justly blames Anaxagoras for the very thing which displeases me in Descartes. For myself, I believe that the laws of mechanics which serve as a basis for the whole system depend on final causes; that is to say, on the will of God determined to make what is most perfect, and that matter does not take all possible forms but only the most perfect; otherwise it would be necessary to say that there will be a time when all will be evil in turn, which is far removed from the perfection of the author of things. As for the rest, if Descartes had been less given to imaginary hypotheses and if he had been more attached to experiments, I think that his physics would have been worthy of being followed. For it must be admitted that he had great penetration. As for his geometry and analysis they are far from being as perfect as those pretend who are given but to the investigation of minor problems. There are several errors in his metaphysics, and he has not known the true source of truths nor that general analysis of notions which Jung, in my opinion, has better understood than he. Nevertheless, I confess that the reading of Descartes is very useful and very instructive, and that I like incomparably more to have to do with a Cartesian than with a man from

some other school. Finally, I consider this philosophy as the ante-chamber of the true philosophy. — *Extract from a letter to Philipp, 1679.*

I esteem Descartes almost as highly as it is possible to esteem a man, and although there are among his opinions some which appear to me false and even dangerous, I do not hesitate to say that we owe almost as much to Galileo and to him in matters of philosophy as to all antiquity. I remember at present but one of the two dangerous propositions of which you wish me to indicate the place, viz: Principiorum Philosophicorum Part. 3, Artieulo 47, his verbis: "Atque omnino parum refert, quid hoc pacto supponatur, quia postea justa leges naturae est mutandum. Et vix aiiquid supponi potest ex quo non idem effectus, quanquam fortasse operosius, deduci possit. Cum enim illarum ope materia formas omnes quarum est capax successive assumat, si formas istas ordine considérerons, tandem ad illam quae est hujus mundi poterimus devenire, adeo ut hic nihil erroris ex falsa hypothesi sit timendum." I do not think that it is possible to form a more dangerous proposition than this. For if matter receive successively all possible forms it would follow that nothing so absurd, so strange and contrary to what we call justice, could be imagined, which has not occurred or would not some day occur. These are exactly the opinions which Spinoza has more clearly explained, namely, that justice, beauty, order belong only to things in relation to us, but that the perfection of God consists in a fullness of action such that nothing can be possible or conceivable which he does not actually produce. This is also the opinion of Hobbes who maintains that all that is possible is past, or present, or future, and that there will be no room for relying on providence if God produces all and makes no choice among possible beings. Descartes took care not to speak so plainly, but he could not help revealing his opinions in passing, with such address that he would not be understood save by those who examine profoundly these kinds of subjects. This, in my opinion, is the πρωτον ψευδος, the foundation of

atheistic philosophy, which does not cease to say things beautiful in appearance of God. But the true philosophy ought to give us an entirely different notion of the perfection of God which could serve us both in physics and in morals; and I, for my part, hold that far from excluding final causes from the consideration of physics, as Descartes pretends, Part 1, Article 28, it is rather by them that all should be determined, since the efficient cause of things is intelligent, having a will and consequently tending toward the Good, that which is still far from the opinion of Descartes who holds that goodness, truth and justice are so simply because God by a free act of his will has established them, which is very strange. For if things are not good or bad, save by an effect of the will of God, the good will not be a motive of his will since it is subsequent to the will. And his will would be a certain absolute decree, without reason; here are his own words, Resp. ad object, sext. n. 8: "Attendenti ad Dei immensitatem manifestum est, nihil omnino esse posse quod ad ipso non pendeat, non modo nihil subsistens, sed etiam nullum ordinem, nullam legam, nullamve rationem veri et boni, alioqui enim, ut paulo ante dicebatur, non fuisset plane indifferens ad ea creanda quae ereavit [he was then indifferent as regards the things which we call just and unjust, and if it had pleased him to create a world in which the good had been forever unhappy and the wicked (that is to say, those who seek only to destroy the others) happy, that would be just. Thus we cannot determine anything as to the justice of God, and it may be that he has made things in a way which we call unjust, since there is no notion of justice as respects him, and if it turns out that we are unhappy in spite of our piety, or that the soul perishes with the body, this will also be just. — He continues]: Nam si quae ratio boni ejus per ordinationem anteeessisset, ilia ipsum determinasset ad it quod optimum est faciendum [without doubt, and this is the basis of providence and of all our hopes; namely, that there is something good and just in itself, and that God, being

Wisdom itself, does not fail to choose the best]. Sed contra quod se determinavit ad ea jam sunt facienda, idcireo, ut habetur in Genesi, sunt valde bona [this is cross reasoning. If things are not good by any idea or notion of goodness in themselves, but because God wills them, God, in Genesis, had but to consider them when they were made and to be satisfied with his work, saying that all was good; it would have sufficed for him to say, I will it, or to have remembered that he willed them, if there is no formal difference between the two things, to be willed by God, and to be good. But it is apparent that the author of Genesis was of another opinion, introducing a God who would not be content with having made them unless he found further that he had made them well.] hoc est ratio eorum bonitatis ex eo pendet, quod voluerit ipsa sic facere." This is as distinct an expression as one could desire. But after this it is useless to speak of the goodness and justice of God, and providence will be but a chimera. It is evident that even the will of God will be but a fiction employed to dazzle those who do not sufficiently strive to fathom these things. For what kind of a will (good God!) is that which has not the Good as object or motive? What is more this God will not even have understanding. For if truth itself depends only on the will of God and not on the nature of things, and the understanding being necessarily BEFORE the will (I speak de prioritate naturae, non temp oris), the understanding of God will be before the truth of things and consequently will not have truth for its object. Such an understanding is undoubtedly nothing but a chimera, and consequently it will be necessary to conceive God, after the manner of Spinoza, as a being who has neither understanding nor will, but who produces quite indifferently good or bad, and who is indifferent respecting things and consequently inclined by no reason toward one rather than the other. Thus, he will either do nothing or he will do all. But to say that such a God has made things, or to say that they have been produced by a blind necessity, the one, it seems to me, is as

good as the other. I have been sorry myself to find these things in Descartes, but I have seen no means of excusing them. I wish he could clear himself from these, as well as from some other imputations with which Morus and Parker have charged him. For to wish to explain everything mechanically in physics is not a crime nor impiety, since God has made all things according to the laws of mathematics; that is, according to the eternal truths which are the object of wisdom.

There are still many other things in the works of Descartes which I consider erroneous and by which I judge that he has not penetrated so far in advance as is imagined. For example, in geometry, I do not really believe that he has made any paralogism (as you inform me that some one has said to you); he was a sufficiently skillful man to avoid that, and you see by this that I judge him equitably; but he has erred through too much presumption, holding all for impossible at which he saw no means of arriving; for example, he believed it was impossible to find a proportion between a curved line and a straight line. Here are his own words: Lib. 3, Geom. articula 9 fin. editionis Schotenianae de anno, 1659, p. 39: cum ratio quae inter rectas et curvas existit, non cognita sit nec etiam ah hominibus tit arbitror cognosci queat. In which, estimating the powers of all posterity by his own, he was very much mistaken. For a little while after his death a method was found of giving an infinity of curved lines to which could be geometrically assigned equal straight lines. He would have perceived it himself if he had considered sufficiently the dexterity of Archimedes. He is persuaded that, all problems may be reduced to equations (quo modo per methodum qua utor, inquit, p. 96, lib. 3, Geom. id *omne quod sub Geometricam contemplationem cadit, ad unum idemque gen us problematum reducatur*, *quod est ut quaeratur valor radicum alicujus aequationis)*. This is wholly false, as Huygens, Hudde and others who thoroughly understand Descartes' geometry, have frankly avowed to me.

This is why there is need of much before algebra can do all that is promised for her. I do not speak lightly and there are few people who have examined the matter with as much care as I.

The physics of Descartes has a great defect; this is that his rules of motion or laws of nature, which should serve as its foundation, are for the most part false. There is demonstration of this. His great principle also that the same quantity of motion is preserved in the world is an error. What I say here is acknowledged by the ablest men of France and England.

Judge from this, sir, whether there is reason for taking the opinions of Descartes for oracles. But this does not hinder me from considering him an admirable man, and for saying between ourselves that if he still lived perhaps he alone would advance farther in physics than a great number of others, although very able men. That befalls me here which ordinarily befalls moderate men. The Peripatetics regard me as a Cartesian, and the Cartesians are surprised that I do not yield to all their pretended lights. For when I speak to prepossessed men of the school who treat Descartes with scorn, I extol the brilliancy of his qualities; but when I have to do with a too zealous Cartesian I find myself obliged to change my note in order to modify a little the too high opinion which they have of their master. The greatest men of the time in these matters are not Cartesians, or if they have been in their youth they have gotten over it, and I notice among the people who make a profession of philosophy and of mathematics, that those who are properly Cartesians ordinarily remain among the mediocre and invent nothing of importance, being but commentators of their master, although for the rest they may be more able than the man of the school. — Letter to Philip, Jan. 1680.

[The following is an extract from a letter of about the same date as the preceding and on the same subject, written to an unknown correspondent.]

Sir, since you desire very much that I express freely my thoughts on Cartesianism, I shall not conceal aught of what I think of it, and which I can say in few words; and I shall advance nothing without giving or being able to give a reason for it. In the first place, all those who give themselves over absolutely to the opinions of any author are in a slavery and render themselves suspected of error, for to say that Descartes is the only author who is exempt from considerable error, is a proposition which could be true but is not likely to be so. In fact, such attachment belongs only to small minds who have not the force or the leisure to meditate themselves, or will not give themselves the trouble to do so. This is why the three illustrious academies of our times, the Royal Society of England, which was established first, and then the Academie Royale des Sciences, at Paris, and the Academia del Cimento, at Florence, have loudly protested that they wish to be known neither as Aristotelians, nor Cartesians, nor Epicureans, nor followers of any author whatever.

I have also recognized by experience that those who are wholly Cartesians are not adepts in inventing, they are but interpreters or commentators of their master, as the philosophers of the school were of Aristotle; and of the many beautiful discoveries which have been made since Descartes, I know of not one which comes from a true Cartesian. I know these gentlemen a little and I defy them to name one coming from them. This is an evidence that Descartes did not know the true method or that he has not transmitted it to them.

Descartes himself had a sufficiently limited mind. Of all men he excelled in speculations, but in them he found nothing useful for life which is evident to the senses and which serves in the practice of the arts. All his meditations were either too abstract, like his metaphysics and his geometry, or too imaginary, like his principles of natural philosophy. The only thing of use which he believed he had given was his telescope, made according to

the hyperbolic line, with which he promised to make us see animals, or parts as small as animals, in the moon. Unfortunately he was never able to find workmen capable of executing his design, and since then it has even been demonstrated that the advantage of the hyperbolic line is not so great as he believed. It is true that Descartes was a great genius and that the sciences are under great obligations to him, but not in the way the Cartesians believe. I must therefore enter a little into details and give examples of what he has taken from others, of what he has himself done, and of what he has left to be done. From this it will be seen whether I speak without knowledge of the subject. In the first place, his ETHICS is a compound of the opinions of the Stoics and of the Epicureans, something not very difficult, for Seneca had already reconciled them very well. He wishes us to follow reason, or the nature of things as the Stoics said, with which everybody will agree. He adds that we ought not to be disturbed by the things which are not in our power. This is exactly the dogma of the Portico which established the greatness and liberty of their sage, so praised for the strength of mind which he had in resolving to do without the things which do not depend upon us and to endure them when they come in spite of us. It is for this reason that I am wont to call this ethics the art of patience. The Sovereign Good, according to the Stoics and according to Aristotle himself, was to act in accordance with virtue or prudence, and the pleasure resulting therefrom together with the resolution mentioned above is properly that tranquility of the soul, or indolence, which the Stoics and Epicureans sought and equally recommended under different names. One has only to examine the incomparable *Manual* of Epictetus and the *Epicurus* of Laertius to acknowledge that Descartes has not advanced the practice of morals. But it seems to me that this art of patience in which he makes the art of living consist, is yet not the whole. A patience without hope does not endure and does not console, and it is here that Plato, in my

opinion, surpasses the others, for by good arguments he makes us hope for a better life and approaches nearest to Christianity. It is sufficient to read the excellent dialogue on the *Immortality of the Soul or the Death of Socrates,* which Theophile has translated into Trench, to conceive a high idea of it. I think that Pythagoras did the same, and that his metempsychosis was merely to accommodate himself to the range of common people, but that among his disciples he reasoned quite differently. Also Ocellus Lucanus, who was one of them, and from whom we have a small but excellent fragment on the universe, says not a word of it. It will be said that Descartes establishes very well the EXISTENCE OF GOD and the immortality of the soul. But I fear that we are deceived by fine words, for the God, or Perfect Being, of Descartes is not a God such as we imagine him and such as we desire; that is to say, just and wise, doing everything for the good of creatures as far as is possible, but rather he is similar to the God of Spinoza, namely, the principle of things, and a certain sovereign power or primitive nature which sets everything in action and does everything which is feasible. The God of Descartes has neither w*ill nor understanding,* since according to Descartes he has not the *Good* as the object of the will nor the *True* as object of the understanding. Also he does not wish that his God should act according to some end, and for this reason he rejects from philosophy the search after final causes, under the adroit pretext that we are not capable of knowing the ends of God. Plato, on the contrary, has very well shown that God being the author of things and provided he acts according to wisdom, true physics is to know the ends and the uses of things, for science is the knowledge of reasons, and the reasons of what has been made by an understanding are the final causes or the designs of him who made them, and these appear from the use and the function which they have. This is why the consideration of the use of parts is so useful in anatomy. This is why a God such as that of Descartes leaves us no other

consolation than that of patience *par force.* He says in some passages that matter passes successively through all possible forms; that is to say, that his God does everything which is feasible and passes, following a necessary and fated order, through all possible combinations; but for this the mere necessity of matter sufficed, or rather his God is nothing but this necessity, or this principle of necessity, acting in matter as it can. It must not, therefore, be believed that this God has any more care of intelligent creatures than of the others. Each one will be happy or unhappy, according as it will find itself involved in great torrents or whirlpools; and he is right in recommending to us patience without hope (in place of felicity). But some one of the better class of Cartesians, deluded by the fine discourses of his master, will say to me that he nevertheless establishes very well the IMMORTALITY OF THE SOUL and consequently a better life. When I hear these things I am astonished at the ease with which the world is deceived, if one can merely play adroitly with agreeable words, although their meaning is corrupted; for just as hypocrites abuse piety, heretics the scriptures, and the seditious the word liberty, so the Cartesians have abused those grand words, the existence of God and the immortality of the soul. It is necessary, therefore, to unravel this mystery and to show them that the immortality of the soul, following Descartes, is worth no more than his God. I well believe that I shall not please some, for people do not enjoy being awakened when their minds are occupied with an agreeable dream. But what is to be done? Descartes teaches that false thoughts should be uprooted before true ones are introduced; his example ought to be followed, and I shall think that I am rendering a service to the public if I can disabuse them of such dangerous doctrines. I say then that the immortality of the soul, as it is established by Descartes, is of no use and can in no way console us. For grant that the soul is a substance and that no substance perishes; this being so the soul will not perish, but in reality also nothing

perishes in nature. But like matter the soul too will change in form, and as the matter composing a man has at other times formed plants and other animals, so this soul may be immortal in reality but it will pass through a thousand changes and not remember at all what it has been. But this immortality without memory is altogether useless, viewed ethically, for it destroys all reward, all recompense, and all punishment. Of what use would it be to you, sir, to become king of China on condition of forgetting what you have been. Would it not be the same thing as if God at the same time that he destroyed you created a king in China? This is why, in order to satisfy the hope of the human race, it must be proved that the God who governs all is wise and just, and that he will leave nothing without recompense and without punishment. These are the great foundations of ethics; but the doctrine of a God who does not act for the Good, and of a soul which is immortal without memory, serves only to deceive the simple and to pervert the spiritually minded.

I could, however, show mistakes in the pretended demonstration of Descartes, for there are still many things to be proved in order to complete it. But I think that at present it is useless to amuse one's self thus, since these demonstrations would be of almost no use, as I have just shown, even if they were good.

NOTES ON SPINOZA'S ETHICS.

[From the Latin.]

PART I. — CONCERNING GOD.

DEFINITION 1. *Self-Caused* is that the essence of which involves existence.

DEFINITION 2. That a thing is finite, which can be limited by another thing of the same kind, is obscure. For what is thought limited by thought? Or what other greater than it is given? He says that a body is limited because another greater than it can be conceived. Add to this what is said below, Prop. 8.

DEFINITION 3. *Substance* is that which is in itself and is conceived through itself. This also is obscure. For what is it to be in itself? Then we must ask, Are to be in itself and to be conceived through itself conjoined cumulatively or disjunctively? That is, whether this means: Substance is that which is in itself, also substance is that which is conceived through itself; or, indeed, whether it means: Substance is that in which both these concur; namely, that it both is in itself and is conceived through itself.

Or it will be necessary for him to demonstrate that what has the one, has also the other, when rather, on the contrary, it seems that there are some things which are in themselves although they are not conceived through themselves. And so men usually conceive substances. He adds: Substance is that, the conception of which does not require the conception of another thing. But there is also a difficulty in this, for in the following definition he says, An attribute is that which the intellect perceives of substance as constituting its essence. Therefore the concept of attribute is necessary for

the formation of the concept of substance. If you say that the attribute is not the thing itself, but require indeed that substance shall not need the conception of another thing, I reply: You must explain what is called thing, that we may understand the definition and how the attribute is not the thing.

DEFINITION 4. That an attribute is that which the intellect perceives of substance as constituting its essence, is also obscure. For we ask whether by attribute he understands every reciprocal predicate; or every essential predicate whether reciprocal or not; or, finally, every first or undemonstrable essential predicate. Vide Definition 5.

DEFINITION 5. A mode is that which is in another and is conceived through another. It seems, therefore, to differ from attribute in this, that attribute is indeed something in substance, yet is conceived through itself. And this explanation added, the obscurity of Definition 4, is removed.

DEFINITION 6. *God*, he says, I define as a being absolutely infinite, or a substance consisting in infinite attributes, of which each expresses eternal and infinite essence. He ought to show that these two definitions are equivalents, otherwise he cannot substitute the one in place of the other. But they will be equivalents when he shall have shown that there are many attributes or predicates in the nature of things, which are conceived through themselves; likewise, when he shall have shown that many predicates can co-exist. Moreover, every definition (although it may be true and clear), is imperfect, which, although understood, allows of doubt as to the possibility of the thing defined. This, moreover, is such a definition, for thus far it may be doubted whether being does not imply having infinite attributes. Or for this reason, because it may be questioned whether the same simple essence can be expressed by many diverse attributes. There are, indeed, many definitions of compound things but only a single one of a simple thing, nor does it seem that its essence can be expressed except in a single way.

DEFINITION 7. A *free* thing is that which exists and is determined to action by the necessity of its own nature; a *constrained* thing is that which is determined to existence and to action by another.

DEFINITION 8. By eternity I understand existence itself so far as it is conceived to follow from the essence of a thing. These definitions [i. e. 7 and 8], I approve.

As to the AXIOMS, I note these things: The first is obscure as long as it is not established what *to be in itself* is. The second and seventh require no comment. The sixth seems incongruous, for every idea agrees with its ideate, nor do I see what a false idea can be. The third, fourth and fifth can, I think, be demonstrated.

PROPOSITION 1. Substance is by nature prior to its modifications; that is, modes, for in Def. 5 he said that by modifications of substance he understands modes. Still he did not explain what to be by nature prior is, and thus this proposition cannot be demonstrated from what precedes. Moreover, by nature prior to another seems to mean that through which another is conceived. Besides I confess that there is some difficulty in this, for it seems that not only can posterior things be conceived through the prior, but also prior things through the posterior. Nevertheless, prior by nature may be defined in this way, as that which can be conceived without another thing being conceived; as also, on the other hand, the other, second thing, cannot be conceived except the first itself be conceived. But if I may say what the matter is, prior by nature is a little too broad; for example, the property of ten, that it is 6 + 4, is by nature posterior to this, that it is 6 + 3 + 1 (because the latter is nearer to the first of all: ten is 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1) and nevertheless it can be conceived without this; nay, what is more, it can be demonstrated without it. I add another example: The property in a triangle, that the three internal angles are equal to two right angles is by nature posterior to this: that two internal angles are equal to the

external angle of the third, and nevertheless the former can be conceived without the latter; nay, even, although not equally easily, it can be demonstrated without it.

PROPOSITION 2. Two substances whose attributes are diverse have nothing in common. If by attributes he means predicates which are conceived through themselves, I concede the proposition, it being posited, however, that there are two substances, A and B, and that C is an attribute of substance A, d an attribute of substance B; or if c, e are all the attributes of substance A, likewise d f are all the attributes of substance B. It is not so if these two substances have some diverse attributes, some common attributes, as if the attributes of A itself were c, d and of B itself were d f. But if he denies that this can happen, the impossibility must be demonstrated. He will, perchance, in case of objection, demonstrate the proposition itself in this way: Because d and c equally express the same essence (since ex hypothesi they are attributes of the same substance, A), and for the same reason also d and f (since also ex hypothesi they are attributes of the same substance, B); therefore c and f express the same essence. Whence it follows that A and B are the same substance, which is contrary to the hypothesis; therefore it is absurd to say that two diverse substances have anything in common. I reply, that I do not concede that there could be two attributes which can be conceived through themselves, and nevertheless express the same thing. For whenever this happens then these two attributes, expressing the same thing in a diverse way, can moreover be resolved, or at least one or the other of them. This I can easily demonstrate.

PROPOSITION 3. Things which have nothing in common cannot be the one the cause of the other, by Axioms 5 and 4.

PROPOSITION 4. Two or more distinct things are distinguished one from the other, either by the difference of the attributes of the substances or

by the difference of their modifications. He demonstrates this thus: Everything which exists, exists either in itself or in something else, by Axiom 1; that is, by Defs. 3 and 5, nothing is granted in addition to the understanding, except substances and their modifications. [Here I am surprised that he forgets attributes for, Def. 5, by modification of substance he understands only modes; it follows, therefore, either that he spoke ambiguously, or that attributes are not numbered by him among the things existing outside of the understanding, but only substances and modes. Still he could have proved the proposition more easily if only he had added, that things which can be conceived through attributes or modifications are necessarily known and therefore distinguished.]

PROPOSITION 5. There cannot be given in the nature of things two or more substances having the same nature or attribute.

[I note here what seems to be obscure in this, viz: in the nature of things. Does he mean, in the universe of existing things, or in the region of ideas or possible essences. Then it is not clear whether he wishes to say that many essences are not given having the same common attribute, or whether he wishes to say many individuals are not given having the same essence. I wonder indeed why he here employs the words nature and attribute as equivalents, unless he understands by attribute that which contains the whole nature. Which being posited, I do not see how there can be given many attributes of the same substance which may be conceived through themselves.] Demonstration: If they are distinguished, they are distinguished either by their modifications or by their attributes; if by their modifications, then since substance is by nature prior to its modifications, by Prop. 1, their modifications being put aside, they must still be distinguished, therefore, by their attributes; if by their attributes, then two substances are not given possessing the same attribute. I reply that a paralogism seems to lurk here. For two substances can be distinguished by

attributes, and yet have some common attribute, provided they also have in addition some which are peculiar. For example, A and B; the attribute of the one being c d, of the other, *de.* I remark that Prop. 1 is only useful for this. But it might have been omitted because it suffices that substance can be conceived without modifications whether it be by nature prior or not.

PROPOSITION 6. One substance cannot be produced by another substance, for two substances, by Prop. 5, do not possess the same attribute, therefore they have nothing in common, by Prop. 2; therefore, it cannot be that one is the cause of the other, by Axiom 5. The same in other words and more briefly: Because what is conceived through itself cannot be conceived through another as cause, by Axiom 4. But I reply, that I grant the demonstration, if substance is understood as a thing which is conceived through itself; it is otherwise if it is understood as a thing which is in itself, as men commonly understand it, unless it be shown that it be in itself and to be conceived through itself are the same thing.

PROPOSITION 7. Existence belongs to the nature of substance. Substance cannot be produced by anything else, Prop. 6. Therefore it is the cause of itself; that is, by Def. 1, its essence involves existence. He is not unjustly censured because sometimes he employs cause of itself as a definite something to which he ascribes a peculiar signification, Def. 1; sometimes he uses it in the common and vulgar meaning. Nevertheless, the remedy is easy, if he converts this Def. 1 into an Axiom and says: Whatever is not by another, is by itself or of its own essence. But here other difficulties still exist: the reasoning, namely, is valid only when it is posited that substance can exist. For it is then necessary that, since it cannot be produced by another, it exists by itself, and thus necessarily exist; but it must be demonstrated that it is a possible substance; that is, that it can be conceived. It seems that it can be demonstrated from the fact that if nothing can be conceived through itself nothing also can be conceived through

another, and hence nothing at all can be conceived. But that it may he shown distinctly, we must consider that if a is posited as conceived through b, there is in the conception of a itself the conception of b itself. And again, if b is conceived through c, there is in the conception of b the conception of c itself, and thus the conception of c itself will be in the conception of *a* itself, and so on to the last. But if any one reply that the last is not given, I answer, neither is the first, which I thus show. Because in the conception of that which is conceived through another there is nothing except what belongs to the other, so step by step through many there will either be nothing at all in it or nothing except what is conceived through it itself; which demonstration, I think, is wholly new but infallible. By this means we can demonstrate that what is conceived through itself can be conceived. But nevertheless, thus far it can be doubted whether it be possible in the way in which it is here assumed to be possible, certainly not for that which can be conceived, but for that of which some cause can be conceived, to be resolved into the first. For those things which can be conceived by us, nevertheless cannot therefore all be produced, on account of others which are preferable and with which they are incompatible. Therefore, being which is conceived through itself must be proved to be in actual existence by the additional evidence that because those things exist which are conceived through another, therefore that also through which they are conceived, exists. You see what very different reasoning is needed for accurately proving that a thing exists through itself. However, perhaps there is no need of this extreme caution.

PROPOSITION 8. Every substance is necessarily infinite, since otherwise it would be limited by another of the same nature, by Def. 2, and two substances would be given with the same attribute, contrary to Prop. 5. This proposition must be understood thus: A thing which is conceived through itself is infinite in its own kind, and thus is to be admitted. But the

demonstration labors not only with obscurity as respects this *is limited*, but also with uncertainty, by reason of Prop. 5. In the scholium he has excellent reasoning to prove that the thing which is conceived through itself is one, of course after its kind, since many individuals are posited as existing, therefore there ought to be a reason in nature why there are so many, not more. The reason which accounts for there being so many accounts for this one and that one; hence also for this other one. But this reason is not found in one of these rather than in another. Therefore it is outside of all. One objection might be made, if it were said that the number of these is boundless or none, or that it exceeds every number. But it can be disposed of, if we assume only some of these and ask why these exist, or if we posit more having something in common, for example existing in the same place, why they exist in this place.

PROPOSITION 9. The more reality or being a thing has the greater the number of its attributes. [He ought to have explained what is meant by reality or being, for these terms are liable to various, significations.] Demonstration: It is clear from Def. 4. Thus the author. It seems to me not to be clear from it. For one thing may have more of reality than another, as what is itself greater in its own kind, or has a greater part of some attribute; for example, a circle has more extension than the inscribed square. And still it may be doubted whether there are many attributes of the same substance, in the way in which the author employs attributes. I confess, however, that if this be admitted and if it is posited that attributes are compatible, substance is more perfect according as it has more attributes.

PROPOSITION 10. Each particular attribute of the one substance must be conceived through itself, by Defs. 4 and 3. But hence it follows, as I have several times urged, that there is but a single attribute of one substance, if it expresses the whole essence.

PROPOSITION 11. God, or substance, consisting of infinite attributes, of which each expresses eternal and infinite essence, necessarily exists. He offers three demonstrations of this. *First,* because he is substance; therefore, by Prop. 7, he exists. But in this he supposes both that substance necessarily exists, which, up to Prop. 7, was not sufficiently demonstrated, and that God is a possible substance, which is not equally easy to demonstrate. *Second.* There must be a reason as well why a thing is as why it is not. But there can be no reason why God does not exist, not in his own nature for it does not involve a contradiction; not in another, for that other will either have the same nature and attribute, and hence will be God, or will not have them and hence will have nothing in common with God, and thus it can neither posit nor prevent his 2 existence. I reply, 1st, that it is not yet proved that the nature of God does not involve a contradiction, although the author says it is absurd to assert, without proof, that it does. 2d. There might be something having the same nature with God in some things, not in all. *Third.* Finite beings exist (by experience); therefore if the infinite does not exist there will be beings more powerful than the infinite being. It may be answered, if it implies anything, infinite being will have no power at all. I need say nothing of the impropriety of calling the potentiality of existence a power.

PROPOSITIONS 12 AND 13. No attribute of substance can be conceived, from which it would follow that substance can be divided; or substance taken absolutely is indivisible. For it will be destroyed by division and the parts will not be infinite and hence not substances. Many substances of the same nature would be given. I grant it of a thing existing through itself. Hence the *corollary* follows that no substance, and therefore no corporeal substance is divisible.

PROPOSITION 11. Besides God, no substance can be granted or conceived. Because all attributes belong to God, nor are several substances

having the same attribute given; therefore, no substance besides God is given. All these suppose the definition of substance, namely, being which is conceived through itself, and many others noted above which are not to be admitted. [It does not yet seem certain to me that bodies are substances. It is otherwise with minds.]

COROLLARY 1. God is one.

COROLLARY 2. Extension or thought are either attributes of God, or, by Axiom... modifications of attributes of God. [This is speaking confusedly; besides he has not yet shown that extension and thought are attributes or conceived through themselves.]

PROPOSITION 15. Whatever is, is in God, and without God nothing can be, or be conceived. For since there is no substance except God, Prop. 14, so all other things will be modifications of God, or modes, since besides substances and modes nothing is given. [Again he omits attributes.]

PROPOSITION 16. From the necessity of the divine nature must follow an infinite number of things in infinite ways; that is, all things which can fall within the sphere of infinite intellect, by Def. 6.

COROLLARY 1. Hence it follows that God is the efficient cause of all things which fall under his intellect.

COROLLARY 2. God is a cause through himself, not indeed *per accidens.*

COROLLARY 3. God is the absolutely first cause.

PROPOSITION 17. God acts solely by the laws of his own nature, and is not constrained by any one, since there is nothing outside of himself.

COROLLARY 1. Hence it follows, 1st, that there can be no cause which, either extrinsically or intrinsically, besides the perfection of his own nature, moves God to act.

COROLLARY 2. God only is a free cause.

In the SCHOLIUM he further explains that God created everything which is in his intellect (although, nevertheless, it seems that he has created only those which he wished). He says also that the intellect of God differs from our intellect in essence, and that, except equivocally, the name intellect cannot be attributed to both, just as the Dog, the heavenly constellation, and a dog, a barking animal, differ. The thing caused differs from its cause in that which it has from the cause. A man differs from man as respects the existence which he has from that man; he differs from God as respects the essence which he has from God.

PROPOSITION 18. God is the immanent, not the transient cause of all things. From this it follows that God only is substance; other things are its modes.

PROPOSITION 19. God, or all his attributes are eternal. For his essence involves existence, and his attributes involve his essence. In addition, the author cites and approves the way in which he demonstrated this in Prop. 19 of his "Principles of Descartes."

PROPOSITION 20. The essence of God and his existence are one and the same thing. He proves all this from the fact that the attributes of God because eternal (by Prop. 19), express existence (by the definition of eternity). But they also express essence, by the definition of attribute. Therefore essence and existence are the same thing in God. I answer that this does not follow, but only that they are expressed by the same. I note, moreover, that this proposition supposes the preceding, but if in place of the preceding proposition its demonstration be employed in the demonstration of this, a senseless circumlocution will be apparent. Thus:

I prove that the essence and existence of God are one and the same thing, because the attributes of God express both existence and essence. They express essence by the definition of attribute, they express existence because they are eternal; they are, moreover, eternal because they involve

existence, for they express the essence of God which involves existence. What need is there, therefore, of mentioning the eternity of the attributes and Prop. 19, when the point merely is to prove that the existence and essence of God are one and the same thing, since the essence of God involves existence. The rest is pompously introduced that it may be fashioned into a sort of demonstration. Reasonings of this sort are exceedingly common with those who do not possess the true art of demonstration.

COROLLARY 1. Hence it follows that God's existence, like his essence, is an eternal truth. I do not see how this proposition follows from the preceding; on the contrary, it is far truer and clearer than the preceding. For it is immediately apparent when it is posited that the essence of God involves existence, although it may not be admitted that they are one and the same.

COROLLARY 2. God and all his attributes are immutable. This the author proposes and proves obscurely and confusedly.

PROPOSITION 21. All things which follow from the absolute nature of any attribute of God must always exist and be infinite; or, in other words, are eternal and infinite through the said attribute. He demonstrates this obscurely and quite at length, although it is easy.

PROPOSITION 22. Whatsoever follows from any attribute of God, in so far as it is modified by a modification which exists necessarily and as infinite through the said attribute, must also exist necessarily and as infinite. He says the demonstration proceeds as in the preceding. Therefore, also obscurely. I could wish that he had given an example of such a modification.

PROPOSITION 23. Every mode, which exists both necessarily and as infinite, must necessarily follow either from the absolute nature of some attribute of God, or from some attribute modified by a modification which

exists necessarily, and as infinite. That is, such a mode follows from the absolute nature of some attribute either immediately or mediately through another such mode.

PROPOSITION 24. The essence of things produced by God does not involve existence; otherwise, by Def. 1, they would be the cause of themselves, which is contrary to the hypothesis. This from elsewhere is manifest; but this demonstration is a paralogism. For cause of itself, by his Def. 1, has not retained its common meaning, but has received a peculiar one. Therefore the author cannot substitute the common meaning of the word for the peculiar one assumed by him at his will, unless he shows that they are equivalent. [Leibnitz has remarked on the margin of the manuscript: From this proposition it follows, contrary to Spinoza himself, that things are not necessary. For that is not necessary whose essence does not involve existence. — *Gerhardt*.]

PROPOSITION 25. God is the efficient cause not only of the existence of things but also of their essence. Otherwise the essence of things could be conceived without God, by Axiom 4. But this proof is of no moment. For even if we concede that the essence of things cannot be conceived without God, from Prop. 15, it does not therefore follow that God is the cause of the essence of things. For the fourth axiom does not say this: That without which a thing cannot he conceived is its cause (which would indeed be false, for a circle cannot be conceived without a center, a line without a point, but the center is not the cause of the circle nor the point the cause of the line), but it says only this: Knowledge of the effect involves knowledge of the cause, which is quite different. For this axiom is not convertible; not to mention that to involve is one thing, not able to be *conceived without it* is another. Knowledge of a parabola involves in it knowledge of a focus, nevertheless it can be conceived without it.

COROLLARY. Individual things are nothing but modifications of the attributes of God, or modes by which the attributes of God are expressed in a fixed and definite manner. This, he says, is evident from Def. 5 and Prop. 15, but it does not appear in what way the corollary is connected with this Prop. 25. Certainly Spinoza is not a great master of demonstration. This corollary is sufficiently evident from what was said above; but it is true if it is understood in a right sense, not indeed that things are such modes, but modes of conceiving particular things are determinate modes of conceiving divine attributes.

PROPOSITION 28. Every individual thing, or everything which is finite and has a conditioned existence, cannot exist or be conditioned to act, unless it be conditioned for existence and action by a cause other than itself, which also is finite, and has a conditioned existence; and likewise this by another, and so on *ad infinitum.* Because nothing conditioned, finite and existing in a certain time, can follow from the absolute essence of God. From this opinion strictly taken many absurd consequences follow. For indeed things will not follow in this way from the nature of God. For the conditioning thing itself is again conditioned by another, and so on *ad infinitum.* In no way, therefore, are things determined by God. God only contributes of himself certain absolute and general things. It would be more correct to say, that one particular thing is not determined by another in a progression *ad infinitum*, for otherwise, indeed, they always remain indeterminate, however far you progress; but rather all particular things are determined by God. Nor are posterior things the full cause of prior things, but rather God creates posterior things so that they are connected with the prior, according to rules of wisdom. If we say that prior things are the efficient causes of the posterior, the posterior will in turn be in a way the final causes of the prior, according to the view of those who claim that God operates according to ends.

PROPOSITION 29. Nothing in the nature of things is contingent, but all things are conditioned to exist and operate in a particular manner by the necessity of the divine nature. The demonstration is obscure and abrupt, deduced from preceding propositions abrupt, obscure and doubtful. It depends upon the definition of *contingent*, which he has nowhere given. I, with others, employ contingent for that the essence of which does not involve existence. In this meaning, particular things are contingent, according to Spinoza himself, by Prop. 24. But if you employ contingent according to the custom of certain scholastics, a custom unknown to Aristotle and to other men and to the usage of life, for that which *happens,* so that a reason can in no way be given why it should occur thus rather than otherwise; the cause of which also, all the requisites as well within as without it having been posited, was equally disposed toward acting or not acting; I think that such a contingent implies that all things are by their nature, according to the hypothesis of the divine nature and the condition of things, certain and determinate, although unknown to us, and do not have their determination in themselves but through the supposition or hypothesis of things external to them.

PROPOSITION 30. Intellect, in action *(actu)* finite, or in action infinite, must comprehend the attributes of God and the modifications of God, and nothing else. This proposition, which is sufficiently clear from the preceding and in a right sense true, our author according to his custom proves by others which are obscure, doubtful and remote; namely, that a true idea must agree with its ideate, that is, as known *per se* (so he says, although I do not see how what is known *per se* is any the more true); that what is contained in the intellect objectively must necessarily be granted in nature; that but one substance is given, namely, God. Nevertheless, these propositions are obscure, doubtful and far-fetched. The genius of the author seems' to have been greatly distorted. He rarely proceeds by a clear and

natural road; he always goes by an abrupt and circuitous one. And most of his demonstrations rather surprise *(surprennent)* the mind than enlighten it.

PROPOSITION 31. The intellect in action, whether finite or infinite, as will, desire, love, etc. should be referred to passive nature *(natura naturata*), not to active nature *(natura naturans).* He understands by active nature, God and his absolute attributes; by passive nature, his modes. But the intellect is nothing else than a certain mode of thought. Hence elsewhere he says that God properly does not know or will. I do not assent to this.

PROPOSITION 32. Will cannot be called a free cause, but only a necessary cause, because, forsooth, that is free which is determined by itself. The will, moreover, is a mode of thought and so is modified by another.

PROPOSITION 33. Things could have been produced by God in no other manner or order than that in which they have been produced. For they follow from the immutable nature of God. This proposition is true or false according as it is explained. On the hypothesis of a divine will choosing the best or operating most perfectly, certainly nothing but these could have been produced; but according to the nature of things regarded in themselves, things might have been produced otherwise. Just as we say that the angels confirmed [in holiness] cannot sin, in spite of their liberty; they can if they will but they do not will. They may be able, absolutely speaking, to will it, but in this existing state of affairs they are not able to will it. The author rightly acknowledges in the scholium that a thing is rendered impossible in two ways, either because it implies it in itself or because no external cause is given suitable for producing it. In the second scholium he denies that God does all things with the Good in view *(sub rations boni*). He certainly has denied to him will, and he thinks that those differing from him subject God to fate, although nevertheless he himself confesses that God does all things by reason of the Perfect *(sub rations perfecti).*

PROPOSITION 34. God's power is his very essence, because it follows from the nature of essence that he is the cause of himself and of other things.

PROPOSITION 35. Whatever exists in the power of God exists necessarily; that is, follows from his essence.

PROPOSITION 36. Nothing exists from whose nature some effect does not follow, because it expresses the nature of God in a certain and determined mode; that is, by Prop. 34, the power of God [it does not follow, but it is nevertheless true].

He adds an APPENDIX against those who think that God acts with an end in view, mingling true with false. For although it may be true that all things do not happen for the sake of man, nevertheless it does not follow that God acts without will or without knowledge of good.

In the copy of Spinoza's *Opera Posthuma*, now contained in the royal library at Hanover, Leibnitz has written the following notes:

PART SECOND OF THE "ETHICS."

On Def. 4, "By an *adéquats idea*, I mean an idea which, in so far as it is considered in itself, without relation to the object has all the properties or intrinsic marks of a true idea," Leibnitz writes: He had therefore to explain what a true idea is, for Part I, Axiom 1, it is employed only as agreement with its ideate.

At the end of the Proof of Prop. 1, "Thought is an attribute of God or God is a thinking thing," Leibnitz adds: In the same way he will prove that God fears and hopes. If you reply that they are modes of thought, it can perhaps be said that thought is a mode of another attribute.

On Prop. 6, "The modes of any given attribute are caused by God, in so far as he is considered through the attribute of which they are modes, and

not in so far as he is considered through any other attribute." Leibnitz remarks: I doubt it, because it seems that something besides is required for modifying any attribute. The reason is the same with that which concludes that not all exist; on the contrary, that certain distinct ones exist.

On Prop. 12, a Whatever comes to pass in the object of the idea, which constitutes the human mind, must be perceived by the human mind, or there will necessarily be an idea in the human mind of this occurrence. That is, if the object of the idea constituting the human mind be a body, nothing can take place in that body without being perceived by the mind," is written: Ideas do not act. The mind acts. The whole world is indeed the object of each mind. The whole world in a certain way is perceived by any mind whatever. The world is one, and nevertheless minds are diverse. Therefore the mind is made not through the idea of the body, but because GOD in various ways intuites the world as I do a city.

To Prop. 13, "The object of the idea constituting the human mind is the body; in other words, a certain mode of extension which actually exists, and nothing else," Leibnitz adds: Hence it follows that some mind is momentarily, at least, in the same man.

At the end of the Proof to Prop. 15, "The idea which constitutes the actual being of the human mind, is not simple, but compounded of a great number of ideas," he remarks: Therefore, also, the human mind is an aggregate of many minds.

On Prop. 20, "The idea or knowledge of the human mind, is also in God, following in God in the same manner, and being referred to God in the same manner, as the idea or knowledge of the human body," he writes: Therefore the idea of the idea is given. Hence it would follow that the thing would go on in infinitum. if indeed the human mind is an idea.

On the words of the Scholium to Prop. 21, "That is, mind and body are one and the same individual, conceived now under the attribute of thought,

now under the attribute of extension," he remarks: Therefore, in fact, mind and body do not differ any more than a city regarded in different ways differs from itself. It follows that extension does not in fact differ from thought, ατοπα.

At the end of this scholium Leibnitz adds: Hence it follows that to understand the idea of the body, or the mind, there is no need of another idea.

On Prop. 23, "The mind does not know itself, except in so far as it perceives the ideas of the modifications of the body," he writes: If the mind perceives itself in any way whatsoever, it follows that there is no idea of the mind in God, other than from the mind itself, for it perceives itself in so far as it expresses God perceiving the mind.

On the words in the proof of this proposition, "The human mind does not know the human body itself," he remarks: On the contrary, just as God or the mind knows the body through the ideas of the modifications of the body, so they know the mind through the ideas of the modifications of the mind.

PART THIRD OF THE "ETHICS."

On Def. 3, "By *emotion* I mean the modifications of the body by which the active power of the body itself is increased or diminished, aided or constrained, and also the ideas of these modifications," he remarks: Emotion is understood also when we do not think of the body.

To Prop; 23, "When we love a thing similar to ourselves we endeavor, as far as we can, to bring about that it should love us in return," he writes: The reason why we endeavor to do good to it is to bring about that we may be loved. But this can and ought to be proved otherwise, for any one can will to do good although he does not seek and think to be loved in return.

On Def. 2 of the Emotions, "Joy is the transition of a man from less to greater perfection," he remarks: I can increase the perfection of the body, so

that I am not aware that I am becoming more beautiful and that my limbs are growing to greater strength. It may be replied that this transition is insensible, and so also is the joy.

On Parts IV and V of the *Ethics* no remarks are found.

THOUGHTS ON KNOWLEDGE, TRUTH AND IDEAS.

[From the Latin. Acta Eruditorum Lipsiensium, Nov. 1684.]

SINCE EMINENT MEN are to-day raising discussions concerning true and false ideas, and since this subject, which even Descartes has not always satisfactorily explained, is of the greatest importance for the knowledge of truth, I propose to explain in a few words, what, in my opinion, may he said with certainty regarding the distinctions and the criteria of our ideas and of our knowledge. Thus knowledge is either *obscure* or *clear*, and clear knowledge is farther either *confused* or *distinct*, and distinct knowledge is either *inadequate* or *adequate*, or again, symbolical or intuitive; and if it is at the same time *symbolical* and *intuitive,* it is perfect in every respect.

A notion is obscure when it is not sufficient to enable us to recognize the thing represented; as for example, where I should have some vague idea of a dower or of an animal which I should have already seen but not sufficiently to be able to recognize it if offered to my sight, nor to *distinguish* it from some neighboring animal; or where I should consider some term badly defined in the schools, such as the *entelechy* of Aristotle, or *cause* in so far as it is common to matter, to form, to efficient cause, or to end, and other expressions of which we have no fixed definition; this renders the proposition of which such a notion forms part equally obscure. Knowledge then is *clear* when it is sufficient to enable me to recognize the thing represented, and it is farther either *confused* or *distinct; confused*, when I cannot enumerate separately the *marks* necessary to distinguish one thing from others, notwithstanding that the object has in reality such marks, as well as data requisite to the analysis of the notion. It is thus that we recognize clearly enough, colors, odors, flavors and other particular objects

of the senses, and that we distinguish the one from the other by the simple testimony of the senses and not by enunciable signs. This is why we cannot explain to a blind person what red is, nor can we make other people recognize qualities of this kind except by placing them in direct communication with them, that is, by making them see, smell and taste, or at least by recalling to them a certain sensation which they have already experienced; and nevertheless it is certain that the notions of these qualities are composite and may be analyzed, because they have their causes. Just so we often see painters or other artists who judge very correctly that a work is good or defective, without being able to account for their judgment, and who reply to those who ask their opinion, that that of which they disapprove, lacks somethings, *I know not what.* But a *distinct* notion resembles that which the assayers have of gold, by the aid of distinctive signs and of means of comparison sufficient to distinguish the object from all other similar bodies. Such are the means of which we make use for notions common to several senses, such as those of number, of magnitude and of figure, as well as for many affections of the mind, such as hope and fear: in a word, for all the objects of which we have a *nominal definition*, which is nothing else than an enumeration of sufficient distinctive marks. We have however a distinct knowledge of an indefinable thing when it is primitive, or when it is only the mark of itself — that is, when it is irreducible and is only understood through itself, and consequently does not possess the requisite marks. As for composite notions where each of the component marks is sometimes clearly known, although in a confused way, as gravity, color, aqua fortis, which form a part of those [the marks] of gold, it follows that such a knowledge of gold is distinct without always being *adequate.* But when all the elements of a distinct notion are themselves also known distinctly, or when its analysis is complete, the idea is *adequate.* I do not know that men can give a perfect example of this, although the

knowledge of numbers approaches it very nearly. It very often happens, nevertheless, especially in a long analysis, that we do not perceive the whole nature of the object at one time, but substitute in place of the things, signs, the explanation of which, in any present thought, we are accustomed for the sake of abbreviation to omit, knowing or believing that we can give it; thus when I think a chiliogon, or polygon with a thousand equal sides, I do not always consider the nature of a side, of equality, and of the number thousand (or of the cube of ten); but these words, the sense of which presents itself to my mind in an obscure, or at least imperfect manner, take the place to me of the ideas which I have of them, because my memory attests to me that I know the signification of these words, and that their explanation is not now necessary for any judgment. I am accustomed to call this thought *blind* or again *symbolical*; and we make use of it in algebra, in arithmetic and almost everywhere. And assuredly when a question is very complex, we cannot embrace in thought at the same time all the elementary notions which compose it; but when this can be done, or at least as far as this can be done, I call this thought *intuitive. We* can only have an intuitive knowledge of a distinct, primitive notion, as most often we have only a symbolical knowledge of composite ideas.

From this it clearly follows that even of the things which we know distinctly, we only conceive the ideas in as far as they form the object of intuitive thought. Also it often happens that we imagine that we have in our minds the ideas of things, from supposing wrongly that we have already explained to ourselves the terms of which we make use. And it is not true, as some say, or at least it is very uncertain, that we cannot speak of anything, understanding fully what we say, without having an idea of it. For often we vaguely understand each of these terms or we remember that we have formerly understood them; but as we content ourselves with this blind thought and as we do not push far enough the analysis of notions, it happens

that unwittingly we fall into the contradiction which the composite idea may imply. I have been led to examine this question more closely by an argument, long celebrated in the schools and renewed by Descartes, for proving the existence of God. It is as follows: All that follows from the idea or from the definition of a thing may be affirmed of the thing itself. From the idea of Ron (or the most perfect being, or one a greater than whom cannot be conceived), existence follows. (For the most perfect being involves all perfections, among which is also existence). Therefore existence may be affirmed of GOD. But it must be known how it comes about that if God be possible, it follows that he exists. For to conclude, we cannot safely use definitions before knowing whether they are real and do not involve any contradiction. The reason of this Is, that if the ideas involve contradiction, opposite things may be concluded at the same time, which is absurd. I am accustomed, in order to render this truth clear, to make use of the example of quickest motion, which involves an absurdity. Suppose then that a wheel turn with the quickest motion, who does not see that a spoke prolonged will move more rapidly at its extremity than at the center of the circumference; therefore the motion is not the quickest, which is contrary to the hypothesis. However it seems at first view, as if we might have an idea of quickest motion, for we understand fully what we say, and yet we cannot have an idea of impossible things. So it does not suffice that we think the most perfect being, to assure us that we have the idea of such a being, and in the demonstration which we have just produced, the possibility of the most perfect being must be shown or supposed, if the conclusion be legitimately drawn. However it is very true both that we have an idea of (TOD, and that the most perfect being is *possible*, and even *necessary;* but the argument is not conclusive and has already been rejected by Thomas Aquinas.

And it is thus that we find a difference between nominal definitions, which only contain the marks of the thing which is to be distinguished from others, and real definitions which show clearly that the thing is possible. And in this way answer is made to Hobbes, who pretended that truths were arbitrary, because they depended on nominal definitions, not considering that the reality of the definition is independent of arbitrariness, and that notions are not always reconcilable among themselves. Nominal definitions are only sufficient to a perfect science when it is well established otherwise that the thing defined is possible. It is very evident also what a true idea is, what a false; the idea is true when the notion is possible; it is false when the notion involves contradiction. Now we know the possibility of a thing either a priori or a posteriori. A priori, when we resolve the notion into its elements, or into other notions of known possibility, and when we know that it includes nothing which is incompatible; and, to cite but one case, this takes place when we understand by what means a thing may be produced, a fact which makes causal definitions more useful than any others: a posteriori, when experience shows us the thing actually existing; for that which exists in fact is necessarily possible. Every time that we have an adequate knowledge, we have also knowledge of the possibility a priori; for if we push the analysis to the end and no contradiction appears, the notion is necessarily possible. Now, is it possible that men should ever construct a perfect analysis of notions, or that they should reduce their thoughts down to first possibilities to irreducible notions, or what is the same thing, down to the absolute attributes of God; that is, to the first causes and to the final reason of things? I should not dare to actually decide this question. Most often we content ourselves with learning from experience the reality of certain notions, from which afterwards we compose others, after the example of nature.

Whence I think it may be understood that it is not always safe to appeal to ideas, and that many abuse this specious title for establishing certain imaginations of their own. For we have not always immediately the idea of the thing of which we are conscious of thinking, as we have shown above in the example of greatest swiftness. And I see that none the less to-day do men abuse this famous principle: *Everything that I conceive clearly and distinctly of a thing is true or may he predicated of it.* For often men, judging hastily, imagine things clear and distinct which are obscure and confused. The axiom is therefore useless unless the *criteria* of clearness and distinctness, which we have indicated be applied, and the truth of the ideas be well established. As for the rest, it is not necessary in the exposition of truth to reject as criteria the rules of ordinary logic of which geometricians make use and which consist in admitting nothing as certain which is not proved by exact experience or solid demonstration. Now a solid demonstration is one which observes the form prescribed by logic, without, however, always having need of syllogisms disposed in the regular order of the schools (like those of which Christianus Herlinus and Conradus Dasypodius made use for the demonstration of the first six books of Euclid); but at least in such a way that the reasoning is conclusive by virtue of its form — an example of such reasoning conceived in the regular form may be found in any legitimate calculus. Thus no necessary premise will be omitted, and all the previous premises must be either proved or at least admitted as hypotheses, in which case the conclusion is hypothetical. Those who will carefully observe these miles will easily guard themselves from deceptive ideas. It is in accordance with such principles that the great genius, Pascal, in an excellent dissertation on the *Mathematical Genius* (a fragment of which exists in the remarkable book of the celebrated Antoine Arnauld, *On the Art of Thinking Well*), says that the geometrician must define all terms in the least obscure and prove all truths in the least

doubtful. But I wish he had defined the limits beyond which a notion or an affirmation is no longer in the least obscure or doubtful. However, we may judge what there is in it by an attentive examination of the considerations which we have just mentioned, for now I wish to be brief.

As to the question whether we see all things in God (an old opinion, too, which reasonably understood ought not to be altogether rejected), or whether we have ideas of our own, it must be understood that even if we see all things in God it is none the less necessary that we have also ideas of our own; that is, not as it were certain little images, but affections or modifications of our mind, answering to that which we perceive in God. For since our thoughts are constantly being succeeded by others, a certain change is wrought in our mind; as for the things not actually conceived by us, ideas of them are in our mind as the statue of Hercules in the rough marble. But with God, on the contrary, must necessarily exist in actuality the idea not only of absolute and infinite extension, but also of each figure, which is nothing else than the modification of absolute extension. Moreover, when we perceive colors and odors we have no other perception but that of figures and motions, but so multiplex and delicate that our mind, in its present state, is incapable of distinctly considering each one and consequently it does not notice that the perception is only composed of extremely small figures and motions. So when, after having mixed yellow powder with blue we perceive a green color, we do not perceive anything but the yellow and blue minutely mixed, although we do not notice it, or rather imagine that we perceive some new entity.

EXTRACT FROM A LETTER TO BAYLE, CONCERNING A GENERAL PRINCIPLE USEFUL IN THE EXPLANATION OF THE LAWS OF NATURE. 1687.

[From the French.]

I HAVE SEEN the reply of Malebranche to the remark which I made concerning certain laws of nature which he had established in the *Search after Truth.* He seems sufficiently disposed to abandon them himself, and this ingenuousness is highly praiseworthy; but as he gives reasons and restrictions, which would land us in the obscurity from which I think I have relieved this subject, and which clash with a certain *principle of general order* which I have observed, I hope that he will have the kindness to permit me to avail myself of the present opportunity to explain this principle, which is of great use in reasoning and which I think is not yet sufficiently employed nor sufficiently known in all its bearing. It takes its origin from the *infinite;* it is absolutely necessary in geometry but it holds good also in physics, for this reason that the sovereign wisdom which is the source of all things acts as a perfect geometrician, and according to a harmony to which nothing can be added. This is why this principle often serves as proof or test to show at first sight and from without, the error of a badly constructed opinion, even before coming to the discussion of the matter itself. It may be stated thus: When the difference of two cases may be diminished below any magnitude given *in datis* or in that which is posited, it must also be found diminished below any magnitude given *in quaesitis* or in that which results therefrom. Or to express it more familiarly, when the cases (or that which is given), continually approach each other and finally lose themselves one in the other, the results or events (or that which is required), must also do the

same. This depends again on a more general principle, to wit: *datis ordinatis etiani quaesita sunt ordinata.* But in order to understand it examples are necessary.

It is known that the case or the supposition of an illipse may approach the case of a parabola as much as may be, so that the difference of the illipse and of the parabola may become less than any given difference, provided that one of the foci of the illipse be sufficiently distant from the other, for then the radii coming from this distant focus will differ from the parallel radii as little as may be, and consequently all the geometrical theorems which are true of the illipse in general can be applied to the parabola by considering the latter as an illipse, one of the foci of which is infinitely distant, or (to avoid this expression), as a figure which differs from some illipse less than any given difference. The same principle holds good in physics; for example, rest may be considered as an infinitely small velocity, or as an infinite slowness. This is why all that is true in respect to slowness or velocity in general, must be true also of rest thus understood; so much so that the rule of rest ought to be considered as a particular case of the rule of motion; otherwise, if this does not hold, it will be a sure sign that the rules are badly contrived. So equality may be considered as an infinitely small inequality, and inequality may be made to approach equality as much as you please.

It is among other faults of this consideration that Descartes, very able man as he was, failed in more than one way in his pretended laws of nature. For (not to repeat here what I said before of the other source of his error, when he took the quantity of movement for force), his first and his second rules, for example, do not agree; the second says that two bodies, B and C, meeting in the same line with equal velocities, and B being as little as possible larger, C will be turned back with its first velocity, but B will continue its movement; whereas according to the first rule, B and C being

equal, both will turn back and retrograde with a velocity equal to that which had carried them thither. But the difference in the results of these two cases is not reasonable; for the inequality of the two bodies may be as slight as you please, and the difference which is in the suppositions of these two cases, to wit: the difference between such an inequality and a perfect equality could be less than any given; hence, by virtue of our principle, the difference between the results or outcomes ought also to be less than any given; notwithstanding if the second rule were as true as the first the contrary would happen, for according to this second rule any increase, however small, of body B before equal to C, makes a difference *grandissime* in the effect, such that it changes absolute retrogression into absolute continuation, which is a great leap from one extremity to the other, whereas in this case body B ought to turn back a little less, and body C a little more than in the case of equality, from which this case can hardly be distinguished.

There are many other like incongruities resulting from the Cartesian rules, which the attention of a reader applying our principle will easily remark, and the like case which I had found in the rules of the *Search after Truth* came from the same source. Malebranche in a way avows that there are inconsistencies, but he does not cease to believe that the laws of movement depending on the good pleasure of God, are regulated by his wisdom, and the geometricians would be also almost as much surprised to see these kinds of irregularities coming into nature as to see a parabola to which might be applied the properties of an illipse with an infinitely distant focus. Also such inconsistencies will never be encountered in nature, I think. The better it is known the more it is found to be geometrical. It is easy to judge from this that these inconsistencies do not properly come from that which Malebranche asserts they do, to wit: from the false hypothesis of the perfect hardness of bodies, which I admit is not found in nature. For

even if we should suppose in it this hardness, regarding it as infinitely quick elasticity, there would result from it nothing which could not be adjusted perfectly to the true laws of nature as regards elastic bodies in general, and never shall we encounter rules so little connected as these in which I have found something to censure. It is true that in composite things sometimes a little change may produce a great effect; as for example, a spark falling into a great mass of gunpowder is capable of overturning a whole city; but this is not contrary to our principle, and these cases may be accounted for by even general principles, but as respects elements or simple things, nothing similar could happen, otherwise nature would not be the effect of infinite wisdom.

Whence it is seen (a little better than in what is commonly said of it), how true physics must be derived really from the source of the divine perfections. It is God who is the final reason of things and the knowledge of God is no less the principle of the sciences than his essence and his will are the principles of beings. The most reasonable philosophers agree in tin's, but there are very few of them who can make use of it to discover truths of importance.

Perhaps these little attempts will arouse some to go much farther. It is sanctifying philosophy to make its streams flow from the fountain of the attributes of God. Far from excluding *final causes* and the consideration of a being acting with wisdom, it is from thence that all must be derived in physics. This it is which Socrates in the *Phaedo* of Plato has already admirably remarked, when reasoning against Anaxagoras and other material philosophers who, after having at first recognized an intelligent principle above matter, do not employ it at all when they come to philosophize on the universe, and instead of showing that this intelligence does everything for the best, and that this is the reason of the things which it has found good to produce conformably to its ends, try to explain everything by the mere concourse of senseless particles, confounding the conditions and

instruments with the true cause. It is (said Socrates), as if in order to explain why I am seated in prison awaiting the fatal stroke and am not on the way to the Boeotians or other peoples, whither, it is known, I might have escaped, it should be said that it is because I have bones, tendons and muscles which can be bent as is necessary in order to be seated. My faith (he says), these bones and these muscles would not be here, and you would not see me in this posture if my mind had not judged that it is more worthy of Socrates to suffer what the laws of the country ordain. This passage in Plato deserves to be read entire, for these are very beautiful and solid reflections. Nevertheless I admit that particular effects of nature may and must be explained mechanically, without forgetting, however, their admirable designs and uses which Providence has known how to take care of, but the general principles of physics and even of mechanics themselves depend on the direction of a sovereign intelligence, and cannot be explained without taking it into consideration. Thus it is that piety must be reconciled with reason, and that good people may be satisfied who fear the results of the mechanical or corpuscular philosophy, as if it would lead us from God and immaterial substances, whereas with the required corrections and everything well understood, it ought to lead us to him.

LETTER FROM LEIBNITZ TO ARNAULD IN WHICH HE STATES HIS PERSONAL VIEWS ON METAPHYSICS AND PHYSICS. 1690.

[From the French.]

SIR — I am HOW on the point of returning home after a long journey, undertaken at the order of my prince for the purpose of historical researches, in which I found certificates, titles and indubitable proofs sufficient to justify the common origin of the illustrious houses of Brunswick and Este, which Messrs. Justel, du Cange and others had good reasons for calling in question, because there were contradictions and falsities in the historians of Este in this respect, together with an utter confusion of times and persons. At present I think of returning and resuming my former course of life, and having written to you two years ago shortly before ml departure, I take the same liberty to-day, to inform myself of your health, and to make known to you how the idea of your eminent merit is always present in my mind. When I was at Rome I saw the denunciation of a new heresy attributed to you, or to your friends, and afterwards I saw the letter of reverend Father Mabillon to one of ml friends, in which there was the statement that the defense by the reverend Father Le Tellier of the missionaries against the practical morals of the Jesuits, had given to many people impressions favorable to these Fathers, but that he had heard that you had replied to it and that it was said that you had overthrown by geometrical reasoning the arguments of that Father. All of which leads me to think that you are still in condition to lender service to the public, and I pray God that it may be so for a long time to come. It is true that this is to my interest, but it is a praiseworthy interest which may

give me the means of learning, whether it be in common with all others who shall read your works, or personally, when your judgments shall instruct me — if the little leisure you have may permit me again to hope sometimes for that advantage.

As this voyage has in part served to relieve my mind from its ordinary occupations, I have had the satisfaction of conversing on matters of science and erudition with several able men, and I have communicated my personal views, which you know, to some in order to profit by their doubts and difficulties; and there have been some who, not satisfied with the common doctrines, have found an extraordinary satisfaction in some of my views. This has led me to write them down that they may he the more easily communicated, and perhaps I shall cause some copies to be printed some day without my name, merely to send them to my friends in order that I may have their judgment on them. I would like you to be able to examine them first, and for that reason I have made the following abstract:

Body is an aggregate of substances, and not properly speaking one substance. It must he, consequently, that everywhere in body there are found indivisible substances, ingenerable and incorruptible, having something corresponding to souls. That all these substances have always been and always will be united to organic bodies differently transformable. That each of these substances contains in its nature legem continuationis seriei suarum operationmn and all that has happened or will happen to it. That all its actions come from its own depths, except dependence on God. That each substance expresses the entire universe, but one more distinctly than an other, especially each as regards certain things and according to its own point of view. That the union of soul with body, and the operation also of one substance or another consists merely in that perfect mutual accord, expressly established by order of the first creation, in virtue of which each substance following its own laws agrees in what the others demand; and the

operations of the one follow or accompany thus the operation or change of the other. That intelligences or souls capable of reflection and of the knowledge of eternal truths and of God, have many privileges which exempt them from the vicissitudes of bodies. That for them moral laws must be added to physical. That all things are made principally for them. That they form together the republic of the universe, of which God is the monarch. That there is a perfect justice and police observed in this city of God, and that there is no wrong action without chastisement, nor good action without proportioned recompense. That the more we come to know things, the more we will find them beautiful and conformed to that which a sage would desire. That we should always be content with the order of the past, because it is conformed to the absolute will of God which is known by the event; but that we must try to render the future as far as it depends on us, conformable to the presumptive will of God or to his commandments; to beautify our Sparta and to labor to do good, without being depressed, however, when success fails, and this in the firm belief that God can discover the times most suited for changes for the better. That those who are not satisfied with the order of things cannot boast of loving God as he should be loved. That justice is but the love of the sage. That love is a universal benevolence which the sage fulfils conformably to the measure of reason, to the end of obtaining lasting contentment, which consists in a continual advance to greater perfection, or at least in the variation of a like degree of perfection.

As regards physics, it is necessary to understand the nature of force, a thing entirely different from motion, which is something more relative. That this force is to be measured by the quantity of effect. That there is an absolute force, a directive force and a respective force. That each of these forces continues in the same degree in the universe, or in each machine not in communication with others, and that the two latter forces, taken together,

compose the first or absolute. But that the same quantity of movement Is not preserved, since I show that otherwise the perpetual movement would be all found, and that the effect would be more powerful than its cause.

It is now some time ago that I published in the Leipsic Ada an essay on physics, to find the physical cause of the movements of the stars. I lay down as basis that all movement of a solid in a liquid, taking place in a curved line or the velocity of which is continually changing, comes from the movement of the liquid itself; whence I draw the inference that the stars have conforming but fluid orbits. I have demonstrated an important general proposition, viz: that every body that moves with a circulation which is harmonious (i. e. such that the distances from the center being in arithmetical progression the velocities are in harmonious progression, or reciprocal to the distances), and which furthermore has a paracentric movement, that is, of gravity or of levity as regards the same center (a certain law which this attraction or repulsion keeps), the said body has the areas necessarily as the times, just as Kepler observed among the planets. Then considering ex observationibus, that this movement is elliptic, I find that the laws of paracentric motion, which motion joined to harmonious circulation describes ellipses, must be such that the gravitations are reciprocally as the squares of the distances; i. e. as the illuminations *ex sole.*

I shall say nothing to you of my calculus of increments or differences, by which I determine the tangents, without eliminating the irrational quantities and fractions even when the unknown quantity is involved in them, and I subject quadratics and the transcendent problems to analysis. And I will not speak either of an entirely new analysis which belongs to geometry and is entirely different from algebra; and still less of some other things on which I have not yet had time to prepare essays. All of which I should like to be able to explain to you in few words, in order to have your opinion, which would be of greatest use to me, on them; if you had as much leisure as I

have deference for your judgment. But your time is too precious, and my letter is already sufficiently long. Therefore I close here, and am, sir,

Your obedient and humble servant,

LEIBNITZ.

Venice, March 23, 1690.

LETTER ON THE QUESTION, WHETHER THE ESSENCE OF BODY CONSISTS IN EXTENSION. 1691.

[From the French.]

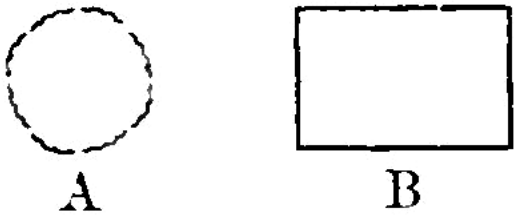
YOU ASK, SIR, the reasons which I have for believing that the idea of body or of matter is other than that of extension. It is true, as you say, that many able men are to-day of the opinion that the essence of body consists in length, breadth and depth. Nevertheless there are still others who cannot be accused of too much attachment to scholasticism, who are not content with this opinion.

M. Nicole, in a certain place in his *Essais*, states that he is of this number and it seems to him that there is more of bias than of insight in those who do not appear repelled by the difficulties which are therein encountered.

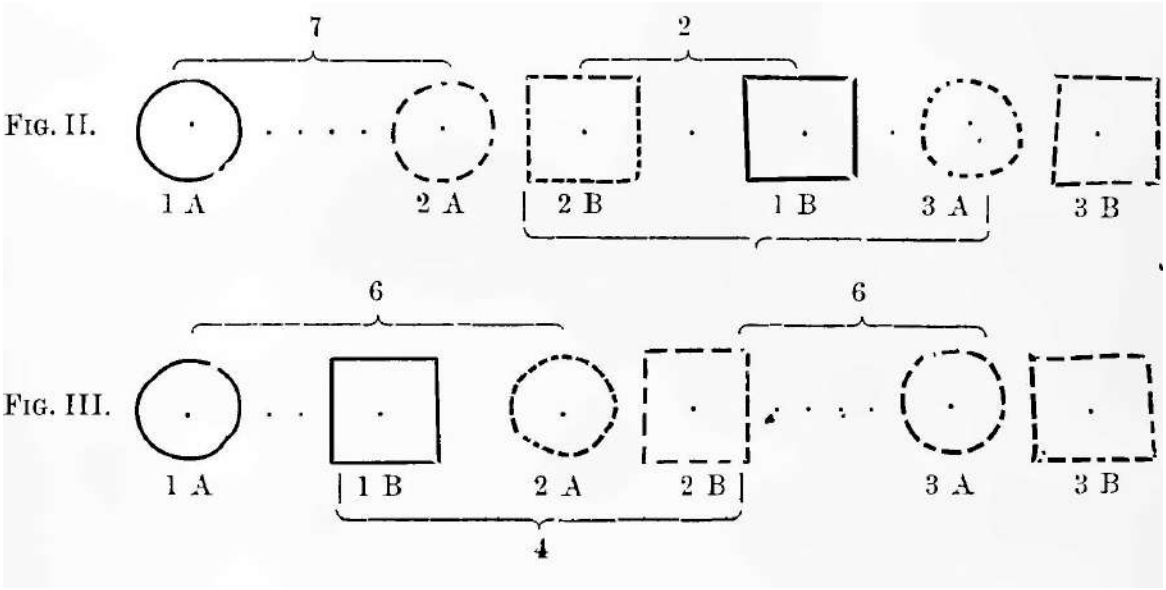
It would require a very full discourse to explain clearly what I think on the subject. However, here are some considerations which I submit to your judgment, and I beg you to make it known to me.

If the essence of body consisted in extension, this extension alone ought to be sufficient to account for all the properties of body. But this is not so. We notice in matter a quality, called by some *natural inertia*, by which body resists movement in a certain way; so that it is necessary to employ some force to set it in motion (even making abstraction of the weight), and a large body is moved with more difficulty than a small body. For example:

FIG. I.



if body A, in motion, encounters body B, at rest, it is evident that if body B were indifferent to motion or to rest, it would allow itself to be pushed by body A without resisting it, and without decreasing the velocity or changing the direction of body A; and after their meeting A would continue its path and B would go in company with it, preceding it. But it is not thus in nature. The larger body B is, the more it will decrease the velocity with which body A moves, even to compelling it to retrograde if B is much larger than A. Now *if there were nothing in bodies but extension,* or situation, that is, that which geometricians recognize in them, joined to the one notion of change; this extension would be entirely indifferent respecting this change, and the results of the meeting of bodies would be explained by the mere geometrical composition of movements; that is to say, the body after the meeting would advance with a movement composed of the impression which it had before the shock and of that which it received from the concurrent, in order not to hinder it; that is, in this case of meeting it would go with the difference of the two velocities and from the side of the direction.



As the velocity of 2 A 3 A, or 2 B 3 B, in figure II, is the difference between 1A 2 A and 1B 2B; and in the *case of contact,* figure III, when the quickest should touch a slower one which precedes it, the slower would receive the velocity of the other, and in general they would proceed always together after the meeting; and in particular, as I said at the beginning, that one which is in motion would carry forward the one in repose, without receiving any diminution of its speed, and without the size, equality or inequality of the two bodies changing in any respect; a thing utterly irreconcilable with experience. And even if we should suppose that size ought to make a change in the movement we should have no principle for determining the means of estimating it in detail, and for knowing the resulting direction and velocity. In any case we should incline to the opinion of the conservation of motion; whereas I believe that I have proved that the same force is preserved, and that its quantity is different from the quantity of the motion.

All this shows that there is in matter something other than what is purely geometrical; that is, than - extension and its change pure and simple. And when we consider it well we perceive that there must he joined to it some higher or metaphysical notion, to wit: that of *substance, action* and *force* and that these notions show that everything which suffers must act reciprocally, and that everything which acts must suffer some reaction; and consequently that a body at rest cannot he carried along by another in motion without changing something of the direction and of the velocity of the agent.

I agree that naturally every body is extended, and that there is no extension without body. Nevertheless the notions of place, of space, of pure extension, must not be confounded with the notion of substance which besides extension includes resistance, that is action and passion.

This consideration seems to me important, not only in order to know the nature of extended substance, but also in order not to slight in physics the higher and immaterial principles, to the prejudice of piety. For although I am persuaded that everything takes place mechanically in corporeal nature I do not cease to believe also that even the principles of mechanics, that is, the first laws of motion, have a more exalted origin than that which pure mathematics can furnish. And I imagine that if this were better known or more considered many pious persons would not have such a bad opinion of the corpuscular philosophy, and modern philosophers would better join the knowledge of nature with that of its author.

I do not enlarge upon other reasons touching the nature of body for that would lead me too far.

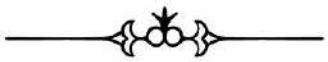
[Extract from a Letter in Support of what he published in the "Journal des Savans" of June 18, 1691. 1693.]

To prove that *the nature of the body does not consist in, extension* I made use of an argument explained in the *Journal des Savans* of June 18, 1691, the gist of which is that we cannot explain by mere extension the *natural inertia of bodies*; that is, that which causes matter to resist movement, or in other words that which brings it about that a body which is already in motion cannot carry along with it another which is at rest, without being retarded thereby. For extension in itself, being indifferent to movement and to rest, nothing ought to hinder the two bodies from going along together with all the velocity of the first, which it tries to impress upon the second. To this, answer is made in the *Journal* of July 16th of the same year (as I learned only a short time ago), that *really body ought to be indifferent to movement or to rest*, *supposing that its essence consists only in being extended;* but that nevertheless a body impelling another must be retarded by it (not because of extension but because of force), because *the same*

*force which was applied to one of the bodies is now applied to both. N*ow the force which moves one of the bodies with a certain velocity must move the two together with less velocity. It is as if it were said in other words that body, if it consist in extension, ought to be indifferent to motion, but that in reality not being indifferent to it, since it resists that which ought to give it motion, it is necessary to employ, in addition to the notion of *extension*, that of *force.* Thus this reply grants just what I wish. And in truth those who are in favor of the system of *Occasional Causes* have already clearly perceived that force and the laws of motion which depend on it, cannot be drawn from extension alone, and as they have taken for granted that there is only extension in matter, they have been obliged to deny to it force and action and to have recourse to the general cause, which is the pure will and action of God. As to which it may be said that they have very well reasoned *ex hypothesi.* But the hypothesis has not yet been proved; and as the conclusion appears not to accord in physics, there is more probability for saying that there is a mistake in the hypothesis (which moreover involves many other difficulties), and that there must be recognized in matter something more than what consists in the mere relation of extension; which, like space, is incapable of action and of resistance, these pertaining only to substances. Those who hold that extension itself is a substance reverse the order of words as well as of thoughts. Besides extension, there must be a subject which is extended, that is, a substance to which it belongs to be repeated or continued. For *extension* signifies only a repetition or continued multiplication of that which is extended; *a plurality*, *continuity and co-existence of parts;* and hence extension is not sufficient to explain the nature of the extended or repeated substance, the notion of which is anterior to that of its repetition.

ANIMADVERSIONS ON DESCARTES' PRINCIPLES OF PHILOSOPHY. 1692.

[From the Latin.]



ON ARTICLE 1. As to what is said by Descartes, that we must doubt all things in which there is the least uncertainty, it would be preferable to express it by this better and more expressive precept: We ought to think what degree of acceptance or dissent everything merits; or more simply, We ought to inquire after the reasons of any dogma. Thus the Cartesian wranglings concerning doubt would cease. But perhaps the author preferred παραδοξολογειν, in order that he might excite the listless reader by novelty. But I could wish that he himself had remembered his own precept, or rather, that he had conceived its true force. We shall explain it and its use best by the example of the geometers. It is agreed among them that there are axioms or postulates, on the truth of which all other things rests. We admit these, both because they immediately satisfy the mind and because they are verified by numberless examples; and nevertheless it would be of importance to the perfection of science that they be demonstrated. This, Apollonius and Proclus in olden time and recently Robervallius, among others, have attempted. And certainly just as Euclid wished to demonstrate that two sides of a triangle taken together are greater than the third (as a certain one of the ancients jestingly said, even asses know enough to go after their food by a straight line, not by a roundabout way), because indeed he wished that geometrical truths should rest not on images of the senses but on reasons; so also he could have demonstrated that two right lines (which if extended do not meet) can have only one common point, if he had had a good definition of right. And I know that the demonstrating of axioms

is of great use to a true analysis or art of discovery. Thus if Descartes had wished to follow what is best in his precept, he ought to have labored toward demonstrating the principles of the sciences, and to have done in philosophy what Proclus wished to do in geometry where it is less necessary. But it seemed preferable to our author to have applause, rather than to have certainty. Nor would I blame him for being content with probability, if he had not aroused our minds by such a great profession of strictness: but I blame Euclid much less when he makes assumptions without proof, for he maintained that we know that if a few hypotheses are admitted, all else is sure and thus equal to them in trustworthiness. If Descartes or other philosophers had done something similar to this, we would not be troubled. And the skeptics also, who condemn the sciences on the pretext that they use principles not immediately demonstrated, ought to regard this as said to them. I, on the contrary, hold that the geometers ought rather to be praised because they prop up the sciences by these, as it were, pegs, and devise an art of proceeding and of deducing many things from few; for if they had wished to defer the invention of theorems or problems until all axioms or postulates had been demonstrated, we should perhaps to-day have no geometry.

ON ARTICLE 2. For the rest I do not see of what use it is to consider doubtful things as false. This would not be to cast aside prejudices, but to change them. But if fiction is so understood, it must not be abused, as, for example, when later on in Article 8 a paralogism will seem to arise when the distinction of the mind from the body is discussed.

ON ARTICLE 4. Moreover we can neither know nor ought we to desire anything of sensible things than that they harmonize as well among themselves as with indubitable reasons and in such a way that future things may, in a certain degree, be foreseen from past things. Any other truth or

reality will be sought in them in vain than that which this vouches for, nor ought skeptics ask anything else nor the dogmatics promise it.

ON ARTICLE 5. We cannot otherwise doubt of mathematical demonstrations except as error may be feared in the reckoning of arithmeticians. This cannot be remedied except by examining the reckoning often, or by different reckonings, confirming proofs being added. This weakness of the human mind, arising from want of attention and of memory, cannot be perfectly removed, and what is adduced by Descartes as a remedy is useless. The same thing suffices as guarantee in other departments which suffices in mathematics; indeed all reasoning, even the Cartesian, however proved or accurate, will yet he subject to this doubt, whatever may finally be thought of any powerful deceptive genius or of the difference between sleep and wakefulness.

ON ARTICLE 6. We have free will not in thinking but in acting. It is not in my will whether honey shall seem to be sweet or bitter, but neither is it in the power of my will whether a theorem proposed to me shall seem true or false, but it is a matter of consciousness alone to consider what seems so. Whoever has affirmed anything is conscious either of a present feeling or reason, or, at least, of a present memory renewing a past feeling or a perception of a past reason; although we are often deceived in this by failure of memory or lack of attention. But consciousness of anything present or past assuredly does not belong to our will. We know that this one thing is in the power of our faculty of will; namely, that it may command attention and zeal, and thus, although it may not make an opinion in us, it can nevertheless indirectly contribute to it. So it happens that often men finally believe that what they wish is true, after they have accustomed the mind to attending most of all to those things which favor it; in which way they bring about that it satisfies not only the will but also consciousness. Cf. Art. 31.

ON ARTICLE 7. *I think therefore I am* is well remarked by Descartes to be among first truths. But it was but just that he should not neglect others equal to this. In general, therefore, it may be said: Truths are either of fact or of reason. The first of the truths of reason is, as Aristotle rightly observed, the principle of *contradiction* or, what amounts to the same thing, of *identity.* First truths of fact are as many as the immediate perceptions, or those of consciousness, so to speak. Moreover not only am I conscious of my thinking but also of my thoughts. Nor is it more certain that I think than that this or that is thought by me. Thus first truths of fact may be not inconveniently referred to these two, *I think,* and *Various things are thought by me.* Whence it follows not only that I am but also that I am affected in various ways.

ON ARTICLE 8. This is not valid: "I am able to assume or imagine that no corporeal things exist but I am not able to imagine that I do not exist or that I do not think; therefore I am not corporeal, nor is thought a mode of body." And I marvel that such an able man could attribute so much to so light a sophism; certainly he adds nothing more in this article. What he brings forward in his *Meditations* will be examined in its proper place. He who thinks that the mind is corporeal, will not admit that you can affirm that no corporeal things exist; but he will admit this, that you can doubt (as long as you are ignorant of the nature of the mind) whether corporeal things exist or do not exist; and since, nevertheless, you see clearly that your mind does exist, he will concede that this one thing thence follows, namely that you can doubt whether the mind is corporeal; nor will anything further be wrested by any tortures from this argument. But this furnished a handle to the paralogism in Art. 2 above, the liberty being assumed of rejecting what is doubted as if it were false, as if it were admissible to assume that there are no corporeal things because it can be doubted whether they exist, which ought not be conceded. It would be otherwise if we knew the nature of the

mind as perfectly as we know its existence, for thus whatever did not appear in it, it would be agreed was not in it.

ON ARTICLE 13. I have already remarked, on Art. 5, that the errors which may arise from want of memory or attention and which occur also in arithmetical calculations (even after a perfect method has been found as in numbers) are recounted here to no purpose, since no art can be devised in which they are not to be feared, especially when the reasoning must be long drawn out; and that therefore we must have recourse to examinations. As for the rest, God seems to be summoned hither for a sort of show or pomp; not to mention that the strange fiction or doubt, whether we are not made to err even in matters most evident, ought to move no one, since the nature of evidence is against it and the experiences and successes of all life are contrary to it. And if ever this doubt could justly be raised, it would be absolutely insuperable; it would confront even Descartes himself and every one else even when presenting the most evident things; this I say, not to mention that it must be known that this doubt is not established by denying; God nor removed by introducing him. For even if there were no God, provided it were possible for us to continue to exist, there would be no reason for our being less capable of truth; and although it be conceded that there is a God, it does not therefore follow that a creature exceedingly fallible and imperfect does not exist, especially when it may be that its imperfection is not native, but perhaps superinduced by a great sin, as Christian theologians teach concerning original sin, yet so that this sin cannot be imputed to God. Moreover although God does not seem to be here aptly introduced, I think, nevertheless, but in a different way, that true knowledge of God is the principle of higher wisdom; for God is not less the first cause than the ultimate reason of things; nor are things known better than from their causes and reasons.

ON ARTICLE 14. The argument for the existence of God drawn from the notion itself of him, Anselm, Archbishop of Canterbury, first, so far as is known, discovered and stated in his extant Liber contra Insipientem. And it was examined here and there by the writers of the scholastic theology and by Aquinas himself, whence Descartes, not without study of it, seems to have borrowed it. This reasoning possesses some beauty but is nevertheless imperfect. The argument amounts to this: Whatever may be demonstrated from the notion of a thing, that can be attributed to the thing. Now from the notion of most perfect or greatest being, existence can be demonstrated. Therefore existence can be attributed to the most perfect being (God), or God exists. The assumption is proved: Most perfect or greatest being includes all perfections, therefore existence also, which undoubtedly is of the number of perfections, since to exist is more or greater than not to exist. Thus far the argument. But if perfection or magnitude had been omitted, the argument might have been constructed even more strictly and more closely in this way. Necessary being exists (or being to whose essence existence belongs, or being of itself exists), as is evident from the terms. Now God is such a being (from the definition of God); therefore God exists. These arguments are valid, provided it be admitted that most perfect or necessary being is possible, and does not imply contradiction, or, what is the same thing, that the essence from which existence follows is possible. But as long as this has not been demonstrated, it certainly ought not to be thought that the existence of God has been perfectly demonstrated by such an argument. And, generally, it ought to be known (as I formerly urged), that from a definition nothing can be safely inferred concerning the thing defined, so long as it is not established that the definition expresses something possible. For if perchance, it implies some hidden contradiction, it might happen that something absurd would be deduced from it. Meanwhile from this argument we become acquainted with this wonderful privilege of the divine nature

that *provided it be possible it exists of itself,* which is not sufficient for proving existence in other things. There only remains for the geometrical demonstration of the divine existence that till possibility of God be demonstrated with accurate severity in geometrical rigor. Meanwhile the existence of that which only lacks possibility receives great faith: as for the rest, that there is some necessary thing is evident from the fact that contingent things exist.

On ARTICLE 18. *We* have an idea of a most perfect being, and therefore the cause of this idea (that is, the most perfect being) exists. This which is Descartes' second argument, is even more doubtful than the possibility of God. It is denied also by many of those who with great zeal acknowledge that God is not only possible but that he exists. Nor is it true, what I remember Descartes somewhere says, that when we speak of something, understanding what we say, we have the idea of the thing. For it often happens that we combine incompatibles, as when we think of *quickest motion*, which is admitted to be impossible and therefore lacks idea; and nevertheless we admit that we speak of this with understanding. Indeed it has been explained by me elsewhere that we often only confusedly think that of which we speak, and are not conscious of an idea existing in our mind unless we understand the thing and resolve it as far as is sufficient.

ON ARTICLE 20. The third argument is burdened with this same vice, as well as others, since it assumes that the idea of the highest perfection of God is in us, and hence it concludes that God exists, since we who have this idea exist.

On ARTICLE 21. From the fact that we now are, it follows that we shall still hereafter be, unless a reason of change exists. So unless it were established elsewhere that we could not even exist unless by favor of God, nothing would be proved for the existence of God from our duration; as if

indeed one part of this duration could be wholly independent of the other; which is not to be admitted.

On ARTICLE 26. Although we are finite, we may nevertheless know many things concerning the infinite, as concerning asymptotic lines or those which produced *ad infinitum* always approach but never meet; concerning infinite spaces not greater than a finite length as respects area; concerning the last members of series which are infinite. Otherwise we should know nothing certain concerning God either. Moreover it is one thing to know something of a thing, another to comprehend the thing, that is, to have in our power whatever lies hidden in the thing.

ON ARTICLE 28. As to what pertains to the ends which God proposed to himself, I clearly think both that those ends of God are to be known and to be investigated with great profit and that contempt of this inquiry is not free from peril or suspicion. And, in general, as often as we see that something has remarkable uses, we may safely assert that among others this end also, namely, that he might furnish these uses, was proposed to God when producing this thing, since he both knew and procured this use of the thing. Elsewhere I have noted and shown by examples that certain hidden physical truths of great moment, which cannot be so easily known through efficient causes, might be disclosed by the consideration of final cause.

ON ARTICLE 30. Even if we admit a perfect substance, which is undoubtedly not the cause of imperfections, the true or fictitious grounds for doubting which Descartes introduced are not thus removed, as I have already noticed, Art. 13.

ON ARTICLES 31, 35. That errors depend more upon the will than upon the intellect, I do not admit. To believe that true which is false or that false which is true when this may be known by investigating, this is to err. So also' through consciousness or memory certain perceptions or reasons arise, and therefore do not depend on the will except in so far as in some indirect

way, and sometimes even unknown to us, it may happen that we seem to ourselves to see those things which we will. Cf. Art. 6. We judge therefore not because we will but because it appears And as for the saying that the will is wider than the intellect, this is more sounding than true; in a word, I may say it is but trappings for the people. We will nothing except it appear to the intellect. The origin of all errors is the same, that which is observed as the reason of errors of reckoning among arithmeticians. For it often happens from a defect of attention or memory that we do what we ought not to do, or leave undone what we ought to do, or think that we have done what we have not done or that we have not done what we have done. So it happens that in reckonings (to which reasoning corresponds in the mind) the right figures are not set down, wrong ones are put down, something is passed over among the things which ought to be taken into account, the method is disturbed. Our mind, indeed, wearied or distracted, does not, for its present operations, sufficiently attend to the matter; or, by an error of memory, it assumes as if formerly proved that which only adheres to us deeply because it has been often inculcated or fixedly regarded or eagerly desired. The remedy also for our errors is the same as that for the errors of reckoning, namely, that we attend to the matter and to the form, that we proceed slowly, that we repeat and vary the operation, that we institute examinations or proofs, that we divide longer reasonings into parts, by which the mind may breathe, and that we confirm each part, as may be, by particular proofs. And since we must in action sometimes be hurried, the great thing is to have acquired presence of mind for one’s self by force of habit, just as those have done who in the midst of tumult and even without writing or calculations are none the less able to compute large numbers, so that the mind is not easily distracted either by the external senses or by its own imaginations or emotions, but always rises above what it is doing and retains the lower of regarding, or, as we commonly say, of turning itself

back upon itself, so that presently, in place of an external admonisher it may say, “See what you are doing, say why you are here, the hour passes.” The Germans admirably call this *sich begreiffen*; the French not less happily, *s’aviser*, as if it were to warn one’s self, to suggest to one’s self, as the nomenclators suggested to Roman candidates the names and merits of citizens worthy to be taken, as the prompter suggests to the comedian the initial words of the rest of the piece, as a certain youth suggested to Philip, king of Macedon, “Remember you are mortal.” But this turning of the mind, s’aviser, is not in our power nor in the election of our will; on the contrary it must first occur to the intellect, and it depends on the present degree of our perfection. It belongs to the will in advance to strive zealously that the mind be well prepared which is advantageously done both by the consideration of the experiences and losses or dangers of others, and also by the use of our own, but (as is allowable) this is at the risk of the loss of time or at least of a light or ludicrous injury; but at the same time there is the accustoming of the mind to a certain order and method of thinking so that afterwards it may occur, when it is needed, as if voluntarily. There nevertheless are errors which without guilt escape or are not avoided. Where we are In trouble not by defect of judgment but by want of memory or ability we are not so much in error as we are ignorant, for we cannot bring it about that we may either know or remember what we will. That kind of directing the mind suffices by which we tight against lack of attention, and as often as memory repeats to us past proofs which perchance were in reality none, we have a confused recollection which is suspicions; and either we repeat the inquiry if it may be done and the matter is important, or we do not rely on past care unless it is sufficiently tested.

ON ARTICLE 37. The highest perfection of man is not more that he acts freely than that he acts with reason; or rather, both are the same, since the

freer one is the less is the use of reason disturbed by the violence of the emotions.

ON ARTICLE 39. To ask whether there is liberty in our will is the same as to ask whether choice is in our will. Free and voluntary mean the same thing. For free is the same as spontaneous with reason; and to will is to be carried to action by a reason perceived by the intellect; moreover the more unconditional the reason is and the less the impulse has of bare and confused perception mixed with it, the freer the action is. To abstain from judgments does not belong to our will but to the intellect suggesting some attention to itself, as has been already said on Art. 35.

ON ARTICLE 40. If anyone thinking that God has preordained all things and nevertheless that he himself is free, and his arguments exhibiting conflict among themselves, makes this one reply, as Descartes orders; namely: that his mind is finite and cannot comprehend such things, he seems to me to reply to the conclusion, not to the argument, and to cut, not to untie, the knot. The question is not whether you comprehend the thing itself, but rather whether you do not comprehend your absurdity on my showing it. There must certainly be a contradiction also in the mysteries of faith not less than in the mysteries of nature. Therefore if you wish to excel as a philosopher, it behooves that you take up the argument, which one of your opponents infers with some appearance of truth from your assertions, and point out the defect in it, which assuredly can al ways be done, unless you have erred.

ON ARTICLES 43, 45, 46. I have elsewhere called attention to the fact that there is no great use in this rule which is laid down, of approving only what is clear and distinct, unless better marks of clear and distinct are brought forward than those which Descartes gave. The rules of Aristotle and the geometers are better, namely: That we should admit nothing, principles (i. e. first truths and hypotheses) of course excepted, unless

proved by legitimate argument; legitimate, I say, that is, burdened neither with defect of form nor of matter. But it is a defect of matter if anything except principles or again things proved from principles by legitimate argument, be assumed. But I understand the right form to be not only the common syllogistic form, but also any other predemonstrated which concludes by force of its own disposition; which also the forms of the operations of the arithmeticians and algebraists, the forms of the book-keepers, indeed also, in some degree, the forms of judiciary process, do: for occasionally we are content to proceed with a certain degree of resemblance. Nevertheless the part of logic, especially useful in life for estimating degrees of probability, remains still to be discussed, concerning which not a few things have been noted down by me. On form, compare further what is said on Art. 75.

ON ARTICLES 47, 48. Some one, I know not who (I think it was Comenius), formerly rightly criticized Descartes for promising, Art. 47, summarily to enumerate all simple notions, and yet directly in the following Article 48, he deserts us, and, some being named, he adds: *and the like*; besides which the larger part of those which he does name are not simple. This is an inquiry of greater moment than is thought.

Ox ARTICLE 50. Truths entirely simple but which nevertheless are not admitted on account of the prejudged opinion of men, we must take especial pains to demonstrate by those more simple.

ON ARTICLE 51. I do not know whether the definition of substance as *that which needs the concurrence of God alone to exist* is appropriate for any created substance known to us, unless interpreted in some less common meaning. For not only do we need other substances, but we need also much more accidents. Since therefore substance and accident mutually need each other, there is need of other marks for discriminating substance from accident; among which may be this, that although the substance may need

some accident it often nevertheless does not need a determinate one but when this one is taken away is content with the substitution of another; the accident, however, not only needs some substance in general but also that one of its own in which it is once present, so that it may not change it. Nevertheless there remain other things to be said elsewhere concerning the nature of substance, of greater moment and of more profound discussion.

ON ARTICLE 52. I confess that there is one principle of substance and one attribute of it, expressing its essence; but I do not know whether it can be explained in words, and those few, so that if you understand individual substance, other kinds of substances may be explained by definitions. But that extension constitutes till common nature of corporeal substance I see asserted by many with great confidence, never proved. Certainly neither motion nor action nor resistance nor passion is thence derived; nor do the laws of nature which are observed in the motion and conjunction of bodies come from the mere notion of extension, as I have elsewhere shown. And indeed the notion of extension is not primitive but resolvable. For it is required in extension that there be a whole *continuum*, in which many things exist at once. And, to speak farther, to extension indeed, the notion of which is relative, something is required which is extended or continued, as in milk whiteness, in body that itself which makes its essence: the repetition of this (whatever it may be) is extension. And I certainly agree with Huygens (whose opinion in natural philosophy and mathematics is of great weight with me) that the conception of a vacant space and of mere extension is the same; nor in my opinion can mobility itself or αντιτυπια be understood of mere extension but of the subject of extension, by which place is not only constituted but also tilled.

ON ARTICLE 54. I do not remember that as yet it has been perfectly demonstrated either by our author or by his partisans that thinking substance is devoid of extension or extended substance of thought, so that

thence it is evident that the one attribute is not required for the other in the same subject nor indeed can consist with it. Nor is this surprising; for the author of the book, *Search After Truth* (in which some excellent things are said), correctly remarks that no distinct notion of thought is offered by the Cartesians, and thus it is not strange if what is involved in it is not clear to them.

ON ARTICLES 60, 61. To deny a real distinction between modes is not a necessary change of the received use of words. For hitherto it has been held that modes exist between things, and they have been seen to really differ, as a spherical wax figure from a square one; certainly there is a true change from one figure to the other, and thus it has a real foundation.

Ox ARTICLE 63. To conceive thought and extension as the thinking substance itself or the extended substance itself seems to me neither right nor possible. This device is suspicions and like that by which doubtful things were commanded to be considered false. Minds are prepared by these distortions of things for pertinacity and for false reasonings.

Ox ARTICLES 65 TO 68. Descartes performed a useful service after the ancients in eradicating that prejudice by which we regard heat, color and other phenomena as something outside of us; when it is evident that what seemed very hot is soon felt by the same hand to be tepid; and he who observes a green color in a pulverized mixture, his eye being presently assisted, no longer perceives a green color but a mixture of yellow and blue, and, with a better equipment or other experiences or reasons, the causes of these two may be perceived; from which it appears that no such thing exists outside of us, the phantasm of which hovers before our imagination. We are ordinarily like boys who are persuaded that a golden pot is to be found at the very end of the rainbow where it touches the earth, which in vain they try to find by running.

Ox ARTICLES 71 TO 74. On the causes of errors we have said something above, on Arts. 31 and 35. From these also the reason for the present ones may be given. For the prejudices of infancy have to do with unproved assertions. Fatigue, moreover, lessens attention; and ambiguity of words belongs to the abuse of signs and makes an error in form; and thus it is as if (as the German proverb says) X were put in place of V in a calculation, or as if a quack doctor in a prescribed formula should select sandarach instead of dragon's blood.

Ox ARTICLE 75. It seems to me fair that we should give to the ancients each one his due, nor by a silence, malignant and injurious to ourselves, conceal their merits. Those things which Aristotle prescribed in his Logic, although not sufficient for discovery are nevertheless almost sufficient for judging; at least where he treats of necessary consequences; and it is important that the conclusions of the human mind be established as if by certain mathematical rules. And it has been noted by me that those who admit false reasonings in serious things oftener sin in logical form than is commonly believed. Thus in order to avoid all errors there is need of nothing else than to use the most common rules of logic with great constancy and severity. But since the complication of things often does not admit of this pedantry, we hence furnish, in the sciences and in things to be done, certain special logical forms, which ought to be demonstrated beforehand by those general rules; the nature of each subject being taken into account; just as Euclid had a certain logic of his own concerning conversions, compositions, divisions of reasons, established first in the special book on elements, and afterwards ruling in the whole geometry. And thus brevity and certainty are at once regarded; and the more there are of these, the more there is of science and of whatever there is that is refined. Those things are to be added which we have noted on Articles 43 et seq.

concerning reasonings which are said to be made in form and which extend farther than is commonly believed.

ON PART II.

ON ARTICLE 1. The argument by which Descartes seeks to demonstrate that material things exist is weak; it were better therefore not to try. The gist of the argument is this: The reason why we believe in material things is external to us, and hence either from God or from another or from things themselves; not from God, if no things exist, for he would be a deceiver; not from another, this he has forgotten to prove; therefore from themselves, therefore they themselves exist. It might be replied, that a sensation may be from an other than God, who as he permits all other evils for certain weighty reasons' so may permit this deceiving of us without having the character of a deceiver, especially as it is joined with no injury, since it would rather be unpleasant to us not to be deceived. Besides the deception therein, which the argument conceals, is that it may be that the perceptions are from God or from another but that the judgment (concerning the cause of the sensation, whether it be from a real object outside of us), and hence the deception, comes from ourselves. Just as happens also when colors and other things of this sort are considered as real objects. Besides souls might have merited by previous sins that they lead this life full of deception where they snatch at shadows for things; to which the Platonists do not seem to be averse, to whom this life seemed as a sleep in the cave of Morpheus, the mind being demented by Lethean draughts before it came thither.

ON ARTICLE 4. That body consists in extension alone Descartes tries to demonstrate by an enumeration of the other attributes which he removes, but it ought to have been shown that the enumeration is sufficient; then not all are well removed, certainly those who admit atoms, that is bodies of greatest hardness, denied that hardness consists in this, namely, that the body does not yield to the motion of the hands, but rather in this, that it

preserves its form. And those who place the essence of body in αντιτυπια, or impenetrability, do not derive its notion from our hands or senses but from the fact that it does not give place to another homogeneous body unless it itself can go elsewhere. Just as if we imagine that against a cube there run six other cubes precisely similar to and resembling the first, so that each one of them with one of its sides accurately coincides with one side of the intercepting cube; on this supposition it would be impossible for either the intercepting cube itself or a part of it to be moved, whether it be understood as flexible or as rigid. But if that middle cube be held to be penetrable extension or empty space then the six concurring cubes will oppose their angles to each other mutually; if however they are flexible, nothing will prevent the middle parts of these from breaking into the intercepting cubical space. Whence also we understand what is the difference between hardness, which belongs to certain bodies, and impenetrability, which belongs to all; which latter Descartes ought to have remembered not less than hardness.

ON ARTICLES 5, 6, 7. Descartes has excellently explained that rarefaction and condensation such as we perceive by the senses may take place although neither interspersed vacuum nor a change of dimensions of the same part of matter be admitted.

ON ARTICLES 8 TO 19. Not a few of those who defend a vacuum consider space as a substance, nor can they be refuted by the Cartesian arguments; other principles are needed to end this dispute. They will admit that quantity and number do not exist outside of the things to which they are attributed, but they will deny that space or place is quantity of body, and they will rather believe that it has quantity or capacity and that body is equal to it in content. Descartes had to show that internal space or place does not differ from the substance of body. Those who are contrary minded will defend themselves by the common notion of mortals who think that

body succeeding body passes over the same space and the same place which has been deserted by a previous body; but this cannot be said if space coincides with the substance itself of body. Although to have a certain situation or to be in a given place is an accident of body they will nevertheless no more admit that place itself is an accident of body than that as contact is an accident, so also what is touched is an accident. And indeed Descartes seems to me not so much to bring forward good reasons for his own opinion as to reply to opposing arguments; which in this place he does not unskillfully. And he often employs this artifice in place of demonstration. But we expected something more and if I am not mistaken we were commanded to expect more. To nothing, it must be confessed, there is no extension, and this may be rightly hurled against those who make space an imaginary something. But those to whom space is a substance are not affected by this argument; they would indeed be affected if Descartes had shown above, what he here assumes, that every extended substance is body.

ON ARTICLE 20. The author does not seem satisfactorily to oppose atoms. Their defenders concede that they may be divided as well in thought as by divine power. But whether bodies which have a firmness inseparable to the forces of nature (which is the true notion of atom among them) can exist naturally, is a question which Descartes (what I wonder at) does not even touch upon in this place, and nevertheless he here declares that atoms have been overthrown by him, and he assumes it in the whole course of his work. We shall have more to say on atoms on Article 54.

ON ARTICLES 21, 22, 23. That the world has no limits of extension and thus can only be one, then that all matter everywhere is homogeneous and is not distinguished except by motions and figures, are opinions which are here built upon the proposition, which is neither admitted by all nor demonstrated by the author, that extension and body are the same thing.

ON ART. 25. If motion is nothing but change of contact or immediate vicinity, it follows that it can never be determined which thing is moved. For as in astronomy the same phenomena are presented in different hypotheses, so it is always permissible to ascribe real motion to either one or other of those bodies which change among themselves vicinity or situation; so that one of these bodies being arbitrarily chosen as if at rest or, for a given reason moving in a given line, it may be geometrically determined what motion or rest must be ascribed to the others so that the given phenomena may appear. Hence if there is nothing in motion but this respective change, it follows that no reason is given in nature why motion must be ascribed to one thing rather than to others. The consequence of this will be that there is no real motion. Therefore in order that a thing can he said to be moved, we require not only that it change its situation in respect to others, but also that the cause of change, the force or action, be in it itself.

[The remarks on the rest of the book, excepting those on *Articles* 45 and 64. are omitted here as being of little philosophical interest. They treat principally of Descartes' opinions as to the laws of motion.]

ON ARTICLE 45. Before I undertake to examine the special laws of motion laid down by our author, I will give a general criterion, or Lydian stone as it were, by which they may be examined, which I am accustomed to call *the law of continuity.* I have recently explained it elsewhere, but it must be repeated here and amplified. Certainly when two hypotheses or two different data continually by turns approach until at length one of them ends in the other, it must be also that the *quaesita aut eventa* of both by turns continually approach one another, and finally, that one vanishes in the other, and *vice versa.* Thus it is with ellipses one focus of which remains unmoved, if the other focus recedes from it more and more, then the new ellipses which are thus produced will continually approach a parabola and finally wholly vanish in it, since Indeed the distance of the receding focus

will have become immeasurable. Whence both the properties of Inch ellipses will approach more and more to the properties of a parabola so far even that they finally vanish in them, and also a parabola may be considered as an ellipse one focus of which is infinitely distant, and hence all the properties of ellipses may he also verified of a parabola as if of such an ellipse. And indeed geometry is full of examples of this kind; but nature, the most wise Author of which employs the most perfect geometry, observes the same, otherwise no ordered progress would be preserved in it. Thus motion gradually decreasing finally vanishes into rest, and inequality continually diminished ends in true equality, so that rest in ay be regarded as infinitely slight motion or as infinite slowness, and equality as Infinitely slight inequality; and for this reason whatever may be demonstrated either of motion in general or of inequality in general must also according to this interpretation be verified of rest or of equality, so that the law of rest or of equality may in a certain way be conceived as a special case of the law of motion or of inequality. But if this does not follow, it must be considered as certain that the rules are awkward and badly conceived.

ON ARTICLE 64. The author closes the Second and General Part concerning the principles of material things with a certain admonition which seems to me to need restriction. He says truly that in order to explain the phenomena of nature there is no need of other principles than those found in abstract mathematics or in the theory of magnitude, figure and motion. Nor does he recognize any other matter than that which is the subject of geometry. I indeed fully assent that all the special phenomena of nature can be explained mechanically if they are sufficiently examined by us, nor can the causes of material things be understood in any other way. But I think also that this ought to be repeatedly considered, that the very mechanical principles and hence the general laws of nature are derived from higher principles, nor can they be explained by the mere consideration of

quantity and of that which is geometrical, but that there is rather in them something metaphysical, independent of the notions which the imagination presents and which must be referred to a substance destitute of extension. For in addition to extension and its variations there is in matter force itself or power of acting which forms a transition from metaphysics to nature, from material things to immaterial. This force has its own laws derived from principles not of mere absolute and, so to speak, brute necessity as in mathematics but of perfect reason. But these being embraced together in a general discussion, afterwards when a reason is given for the phenomena of nature, all can be explained mechanically, and as vainly as fundamental *(archaei)* perceptions and desires, and operating ideas, and forms of substances, and souls also are then employed, so vainly would we call in the universal cause of all, as a *Deus ex machina*, to explain each natural thing by his simple will, which I remember the author of *Philosophia Mosaica* does, the words of Sacred Scripture being badly understood. He who will consider this properly will hold a middle position in philosophy and will satisfy theology no less than physics, and he will understand that it was not so much a sin of the schoolmen to hold the doctrine of *intelligible forms* as to apply it as they did, at the time when the inquiry was rather of the modifications and instruments of substance and its manner of acting, that is, its mechanism. Nature has as it were an empire within an empire, and so to say a double kingdom, of reason and of necessity, or of forms and of particles of matter; for just as all things are full of spirits, so also they are full of organized bodies. These realms without confusion between them are governed each by its own law, nor is the reason of perception and of desire in the modifications of extension, any more than the reason of nutrition and of other organic functions are to be found in forms or spirits. But this highest substance, which is the universal cause of all, brings it about by his infinite wisdom and power that these two very different series are referred

to the same corporeal substance and perfectly harmonize between themselves just as if one was controlled by the influence of the other; and if you observe the necessity of matter and the order of efficient powers, you observe that nothing happens without a cause satisfying the imagination and except on account of the mathematical laws of mechanism; or if you regard the circle of ends as a golden chain and of forms as an intelligible world, the apexes of ethics and of metaphysics being joined in one on account of the perfection of the supreme author, you notice that nothing can be done without the highest reason. For GOD and eminent form and first efficient are the same, and he is the end or final reason of things. Moreover it is our part to reverence his footprints in things, and not only to admire his instruments in operating and the mechanical cause of material things, but also the higher uses of admirable ingenuity, and as we recognize God as the architect of bodies so also to recognize him especially as the king of minds and his intelligence as ruling all things for the best, which constitutes the most perfect Republic of the Universe under the most powerful and wisest of Monarchs. Thus in the particular phenomena of nature and in the connection of each consideration, we shall consult equally utility of life and perfection of mind, and wisdom no less than piety.

LEIBNITZ'S REPLY TO THE EXTRACT FROM THE LETTER OF M. FOUCHER, CANON OF DIJON, PUBLISHED IN THE "JOURNAL" OF MARCH 10. 1693.

[From the French.]

ONE OUGHT TO be very glad, sir, that you give a reasonable meaning to the doubt of the Academicians. It is the best apology that you could make for them. I shall be charmed to see sometime their views digested and made clear by your pains. But you will be obliged from time to time to lend them some ray of your light, as you have begun to do.

It is true that I wrote two little discourses, twenty years ago, one *on the theory of abstract motion,* wherein I considered it as outside of the system, as if it were a thing purely mathematical; the other *on the hypothesis of concrete and systematic motion*, such as really is met with in nature. There may he some good in them since you with others judge so. However there are many points on which I believe that I am better instructed at present, and among others I explain to-day *indivisibles* in an entirely different way. That was the attempt of a young man who had not yet fathomed mathematics. The laws of abstract motion which I gave at that time would really hold good if there was nothing else in body but what is conceived there according to Descartes and even according to Gassendi. But as I have found that nature treats body quite differently as regards motion it is one of my arguments against the received notion of the nature of body, as I have indicated in the *Journal des Savons* of June 2, 1692.

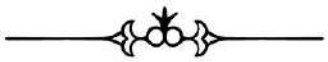
As regards *indivisibles*, when by that word is understood simple extremities of time or of line, new extremities could not be conceived in them, nor actual nor pretended parts. Thus points are neither large nor

small, and there needs no leap to pass them. However, although there are such *indivisibles* everywhere, continuity is not composed of them, as the objections of the sceptics appear to suppose. In my opinion these objections have nothing insurmountable about them, as will be found by reducing them to form. Gregory of St. Vincent has well shown by the calculations even of divisibility *ad infinitum,* the place where Achilles ought to overtake the tortoise which precedes him, according to the proportion of velocities. Thus geometry serves to dissipate these apparent difficulties.

I am so much in favor of the actual infinite that instead of admitting that nature abhors it, as is commonly said, I hold that it affects it everywhere in order better to mark the perfections of its author. So I believe that there is no part of matter which is not, I do not say divisible, but actually divided; and consequently the least particle must be regarded as a world full of an infinity of different creatures.

EXTRACT FROM A LETTER TO THE ABBE NICAISE ON THE PHILOSOPHY OF DESCARTES. 1793.

[From the French.]



I HONOR EXCEEDINGLY the Bishop d'Avranches, and I beg you, sir, to give him my respects when occasion offers. One of my friends in Bremen having sent me the book of Herr Swelling, professor there, against the censure of that illustrious prelate, in order to have my opinion of it, I replied that the best answer that the Cartesians could make would be to profit by the advice of d'Avranches; to emancipate themselves from the spirit of sect, always contrary to the advancement of the sciences; to unite to the reading of the excellent works of Descartes that of some other great men, ancient and modern; not to despise antiquity, whence Descartes has taken a good part of his best thoughts; to give themselves to experiments and to demonstrations in place of those general reasonings which serve but to support idleness and to cover up ignorance; to try to make some advance and not to content themselves with being simple paraphrasera of their master, and not to neglect or despise anatomy, history, the languages, criticism, for want of knowing their importance and value; not to imagine that we know all that is necessary or all we may hope to; finally, to be modest and studious, in order not to draw upon themselves this apt saying: *Ignorantia inflat.* I shall add that I do not know how or by what star, the influence of which is the enemy of every sort of secret, the Cartesians have done almost nothing that is new, and that almost all the discoveries have been made by persons not of the sect. I know but the little pipes of M. Rohault, which do not deserve the name of a Cartesian discovery. It seems that those who attach themselves to a single master abase themselves by this

kind of slavery and conceive almost nothing except in imitation of him. I am sure that if Descartes had lived longer he would have given us many important things. This shows us either that it was rather his genius than his method, or else that he has not published his method. In fact I remember having read in one of his letters that he intended simply to write a discourse on his method, and to give some examples of it; but that he had no intention of publishing it. Thus the Cartesians who think that they have the method of their master deceive themselves very much. Nevertheless, I imagine that this method was not so perfect as we are made to believe. I think so from his geometry. This is, without doubt, his strong point; nevertheless we know to-day that it is very far from going as far as it ought to go and as he said it went. The most important problems need a new sort of analysis entirely different from his, examples of which I myself have given. It seems to me that Descartes did not sufficiently penetrate the important truths of Kepler on astronomy which the course of time has verified. His "*Man*" is very different from the true man, as M. Stenon and others have shown it to be. The knowledge he had of salts and chemistry was very meagre; this is the reason that what he says thereon, as well as on minerals, is mediocre. The metaphysics of this author, although it has some fine traits is intermingled with great paralogisms, and has some very weak passages. I have discovered the source of his errors as to the laws of motion, and although I esteem very highly his physics it is not because I regard it as true, except in some particular things, but because I consider it as an admirable model and as an example of what could and ought now to be produced on principles more solid than experiments have thus far furnished us with. In a word, I esteem Descartes very highly, but very often it is not permitted me to follow him. I have in the past made remarks on the first and second parts of his "Principles." The parts comprise, in epitome, his general philosophy, in which I have most often been obliged to separate myself from him. The

following parts come to the detail of nature, which is not yet so easily explained. This is why I have not yet touched it. But I do not know how I have been insensibly led to entertain you so long on this subject.

ON THE REFORM OF METAPHYSICS AND OF THE NOTION OF SUBSTANCE. 1694.

[From the Latin.]

I SEE THAT most of those who devote themselves with pleasure to the study of mathematics entertain a dislike for that of metaphysics because in the former they find clearness and in the latter obscurity. I think that the principal reason of this is that general notions, which are believed to be perfectly known by all, have become ambiguous and obscure by the negligence of men and by the inconsistency of their thoughts, and that what are ordinarily given as definitions are not even nominal definitions, because they explain absolutely nothing. And it is not to be wondered at that this evil has spread into the other sciences, which are subordinate to this first and architectonic science. Thus we have subtile distinctions in place of clear definitions, and in place of truly universal axioms we have general rules which are more often broken by exceptions than supported by examples. And yet men by a sort of necessity frequently make use of metaphysical terms, and flatter themselves that they understand what they have learned to say. And it is manifest that the true and fruitful meanings not only of substance but also of cause, of action, of relation, of similarity and most other general terms, he for the most part hidden. Whence it is not surprising that this queen of the sciences, which is called first philosophy and which Aristotle defined as the science desired or to be sought for remains to-day in the number of the sciences sought. Plato, it is true, often in his Dialogues inquires into the value of notions; Aristotle does the same in his books entitled Metaphysics; nevertheless, without much apparent profit. The later Platonists fall into monstrosities of language, and the disciples of Aristotle,

especially the Scholastics, were more desirous of raising questions than of answering them. In our day some illustrious men have also devoted themselves to the first philosophy, but up to the present time without much success. It cannot be denied that Descartes brought to it many excellent things; that he has above all the merit of having renewed Platonic study by turning the mind away from the things of sense and of having afterwards employed usefully academic scepticism; but soon, by a sort of inconsistency or of impatience to affirm, he was led astray, no longer distinguishing the certain from the uncertain, and hence making the nature of corporeal substance incorrectly consist in extension and holding a false conception of the union of the soul and the body, the cause of which was that the nature of substance in general was not understood. For he had proceeded at a bound, as it were, to the solution of the gravest questions, without having explained the notions which they implied. Hence, nothing shows more clearly how far his metaphysical meditations are removed from certainty than the writing in which, at the prayer of Mersenne and others, he vainly tried to clothe them with a mathematical garb. I see also that other men gifted with rare penetration have broached metaphysics and treated some parts of it with profoundness, but enveloping them with so much obscurity that they appear to surmise rather than to prove. But metaphysics, it seems to me, has more need of clearness and certainty than even the mathematics, because the latter carry with them their proofs and corroborations which is the principal cause of their success; whereas in metaphysics we are deprived of this advantage. Therefore a certain particular plan is necessary in exposition which, like the thread in the Labyrinth, serves us, no less than the method of Euclid, for resolving our problems after the manner of calculus, preserving, nevertheless, always the clearness which even in common conversation should not be sacrificed.

How important these things are is apparent, especially from the *notion of substance* which I give, because it is so fruitful that from it first truths, even those which concern God and souls and the nature of bodies, follow; truths in part known but not sufficiently proved; in part unknown up to this time but which would be of the greatest usefulness in the other sciences. To give a foretaste of them, it is sufficient for me to say that the idea of energy or virtue, called by the Germans *kraft,* and by the French *la force,* and for the explanation of which I have designed a special science of *dynamics,* adds much to the understanding of the *notion of substance.* For active force differs from the bare power familiar to the schools, in that the active power or faculty of the scholastics is nothing else than the possibility ready to act, which has nevertheless need, in order to pass into action, of an external excitation, and as it were of a stimulus. But active force includes a sort of act, which is midway between the faculty of acting and the action itself, and involves an effort, and thus of itself passes into operation; nor does it need aid other than the removal of impediments. This may be illustrated by the example of a heavy hanging body straining the rope which sustains it, or a tense bow. For although gravity or elastic force may and must be explained mechanically from the motion of ether, nevertheless the final reason of motion in matter is the force impressed upon it at the creation, a force inherent in every body, but which is variously limited and confined in nature by the very meeting of bodies. I say, then, that this property of acting resides in every substance, that always some sort of action is born of it; and that, consequently, corporeal substance, no less than spiritual, never ceases to act; a truth which those who place its essence in mere extension or even in impenetrability, and who have imagined that they conceived of body absolutely at rest, seem not to have sufficiently understood. It will appear also from our meditations that a created substance receives from another created substance, not the force itself of acting but only the limits and

determination of an already pre-existent tendency or virtue of acting. I omit here other considerations useful for the solution of the difficult problem concerning the mutual operation of substances.

A NEW SYSTEM OF NATURE, AND OF THE INTERACTION OF SUBSTANCES, AS WELL AS OF THE UNION WHICH EXISTS BETWEEN THE SOUL AND THE BODY. 1695.

[From the French.]

1. I CONCEIVED this System many years ago and communicated it to some learned men, and in particular to one of the greatest theologians and philosophers of our time, who, having been informed of some of my opinions by a very distinguished person, had found them highly paradoxical. When, however, he had received my explanations, he withdrew his condemnation in the most generous and edifying manner; and, having approved a part of my propositions, he ceased censuring the others with which he was not yet in accord. Since that time I have continued my meditations as far as opportunity has permitted, in order to give to the public only thoroughly examined views, and I have also tried to answer the objections made against my essays in dynamics, which are related to the former. Finally, as a number of persons have desired to see my opinions more clearly explained, I have ventured to publish these meditations although they are not at all popular nor fit to be enjoyed by every sort of mind. I have been led to do this principally in order that I might profit by the judgments of those who are learned in these matters, inasmuch as it would be too inconvenient to seek and challenge separately those who would be disposed to give the instructions which I shall always be glad to receive, provided the love of truth appears in them rather than passion for opinions already held.

2. Although I am one of those who have worked very hard at mathematics I have not since my youth ceased to meditate on philosophy, for it always seemed to me that there was a way to establish in it, by clear demonstrations, something stable. I had penetrated well into the territory of the scholastics when mathematics and modern authors induced me while yet young to withdraw from it. Their fine ways of explaining nature mechanically charmed me; and, with reason, I scorned the method of those who employ only forms or faculties, by which nothing is learned. But afterwards, when I tried to search into the principles of mechanics to find proof of the laws of nature which experience made known, I perceived that the mere consideration of an *extended mass* did not suffice and that it was necessary to employ in addition the notion of *force,* which is very easily understood although it belongs to the province of metaphysics. It seemed to me also that the opinion of those who transform or degrade animals into simple machines, notwithstanding its seeming possibility, is contrary to appearances and even opposed to the order of things.

3. In the beginning, when I had freed myself from the yoke of Aristotle, I occupied myself with the consideration of the void and atoms, for this is what best fills the imagination; but after many meditations I perceived that it is impossible to find the principles of *true* '*unity* in mere matter, or in that which is only passive, because there everything is but a collection or mass of parts *ad infinitum.* Now, multiplicity cannot have its reality except from *real unities*, which originate otherwise and are entirely different things from the points of which it is certain the *continuum* could not be composed. Therefore, in order to find these real unities I was compelled to resort to a formal atom, since a material being could not be at the same time material and perfectly indivisible, or in other words, endowed with true unity. It became necessary, therefore, to recall and, as it were, reinstate the *substantial forms*, so decried now-a-days, but in a way to render them

intelligible, and distinguish the use which ought to be made of them from the abuse which had befallen them. I found then that their nature is force and that from this something analagous to sensation and desire results, and that therefore it was necessary to conceive them similarly to the idea which we have of *souls.* But as the soul ought not to be employed to explain the details of the economy of the animal body, likewise I judged that it was not necessary to employ these forms to explain particular problems in nature although they are necessary in order to establish true general principles. Aristotle calls them the *first entelechies.* I call them, perhaps more intelligibly, *primitive forces* which contain in themselves not only the *act* or complement of possibility, but also an original *activity.*

4. I saw that these forms and these souls ought to be indivisible, just as much as our mind, as in truth I remembered was the opinion of St. Thomas in regard to the souls of brutes. But this innovation renewed the great difficulties in respect to the origin and duration of souls and of forms. For every *simple substance* which has true unity cannot begin or end except by miracle; it follows, therefore, that it cannot begin except by creation, nor end except by annihilation. Therefore, with the exception of the souls which God might still be pleased to create expressly, I was obliged to recognize that the constitutive forms of substances must have been created with the world, and that they must exist always. Certain scholastics, like Albertus Magnus and John Bacon, had also foreseen a part of the truth as to their origin. And the matter ought not to appear at all extraordinary for only the same duration which the Gassendists accord their atoms is given to these forms.

5. I was of the opinion, nevertheless, that neither spirits nor the rational soul, which belong to a superior order and have incomparably more perfection than these forms implanted in matter which in my opinion are found everywhere — being in comparison with them, like little gods made

in the image of God and having within them some rays of the light of divinity, ought to be mixed up indifferently or confounded with other forms or souls. This is why God governs spirits as a prince governs his subjects, and even as a father cares for his children; while he disposes of the other substances as an engineer manipulates his machines. Thus spirits have peculiar laws which place them above the changes which matter undergoes, and indeed it may be said that all other things are made only for them, the changes even being adapted to the felicity of the good and the punishment, of the bad.

6. However, to return to ordinary forms or to material souls [ames brutes], the duration which must be attributed to them in place of that which had been attributed to atoms, might raise the question as to whether they pass from body to body, which would be metempsychosis — very like the belief of certain philosophers in the transmission of motion and of the species. But this fancy is very far removed from the nature of things. There is no such passage; and here it is that the transformations of Swammerdam, Malpighi and Leewenhoeck, who are the best observers of our time, have come to my aid and have made me admit more easily that the animal and every other organized substance does not at all begin when we think it does, and that its apparent generation is only a development and a sort of augmentation. Also I have noticed that the author of the Search after Truth [i.e. Malebranche], Rigis, Hartsoeker and other able men, have not been far removed from this opinion.

7. But the most important question of all still remained: What do these souls or these forms become after the death of the animal or after the destruction of the individual of the organized substance? It is this question which is most embarrassing, all the more so as it seems unreasonable that souls should remain uselessly in a chaos of confused matter. This obliged me finally to believe that there was only one reasonable opinion to hold,

namely, that not only the soul but also the animal itself and its organic machine were preserved, although the destruction of its gross parts had rendered it so small as to escape our senses now just as much as it did before it was born. Also there is no person who can accurately note the true time of death, which can be considered for a long time solely as a suspension of visible actions, and indeed is never anything else in mere animals; witness the *resuscitation* of drowned flies after being buried under pulverized chalk, and other similar examples, which make it sufficiently clear that there would be many more resuscitations and of far more intricacy if men were in condition to set the machine going again. And apparently it was of something of this sort that the great Democritus, atomist as he was, spoke, although Pliny makes sport of the idea. It is then natural that the animal having, as people of great penetration begin to recognize, been always living and organized, should so remain always. And since, therefore, there is no first birth nor entirely new generation of the animal, it follows that there will be no final extinction nor complete death taken in its metaphysical rigor, and that in consequence instead of the *transmigration* of souls there is only a *transformation* of one and the same animal, according as its organs are folded differently and more or less-developed.

8. Nevertheless, rational souls follow very much higher laws and are exempt from all that could make them lose the quality of being citizens in the society of spirits, God having planned for them so well, that all the changes in matter cannot make them lose the moral qualities of, their personality. And it can be said that everything tends to the perfection not only of the universe in general but also of those creatures in particular who are destined to such a measure of happiness that the universe finds itself interested therein, by virtue of the divine goodness which communicates itself to each one, according as sovereign wisdom permits b. As regards the ordinary body of animals and of other corporeal substances, the complete

extinction of which has up to this time been believed in, and the changes of which depend rather upon mechanical rules than upon moral laws, I remarked with pleasure that the author of the book On Diet, which is attributed to Hippocrates, had foreseen something of the truth when he sail in express terms that animals are not born and do not die, and that the things which are supposed to begin and to perish only appear and disappear. This was also the opinion of Parmenides and of Melissus, according to Aristotle, for these ancients were more profound than is thought.

10. I am the best disposed in the world to do justice to the moderns; nevertheless I think they have carried reform too far, for instance, in confounding natural things with artificial, for the reason that they have not had sufficiently high ideas of the majesty of nature. They conceive that the difference between its machines and ours is only that of large to small. This caused a very able man, author of *Conversations on the Plurality of Worlds*, to say recently that in regarding nature close at hand it is found less admirable than had been believed, being only like the workshop of an artisan. I believe that this does not give a worthy idea of it and that only our system can finally make men realize the true and immense distance which there is between the most trifling productions and mechanisms of the divine wisdom and the greatest masterpieces of the art of a finite mind, this difference consisting not merely in degree but also in kind. It must then be known that the machines of nature have a truly infinite number of organs and that they are so well protected and so proof against all accidents that it is not possible to destroy them. A natural machine remains a machine even to its least parts and, what is more, it remains always the same machine it has been, being only transformed by the different folds it receives, and sometimes expanded, sometimes compressed and, as it were, concentrated when believed to be lost.

11. Farther, by means of the soul or of form there arises a true unity which answers to what we call the I in us, that which could take place neither in the machines of art nor in the simple mass of matter however well organized it might be, which can only he considered as an army, or as a herd of cattle, or as a pond full of fish, or as a watch composed of springs and wheels. Nevertheless, if there were not real substantial unities there would be nothing substantial or real in the mass. It was this which forced Cordemoi to abandon Descartes, and to embrace Democritus' doctrine of the Atoms, in order to find a true unity. But atoms of matter are contrary to reason, leaving out of account the proof that they are made up of parts, for the invincible attachment of one part to another (if such a thing could be conceived or with reason supposed) would not at all destroy their diversity. Only atoms of substance, i. e. unities which are real and absolutely destitute of parts, are sources of actions and the absolute first principles of the composition of things, and, as it were, the last elements of the analysis of substances. They might be called *metaphysical points;* they possess a certain *vitality* and a kind of *perception*, and *mathematical points* are their *points of view* to express the universe. But when corporeal substances are compressed all their organs together form a *physical point* to our sight. Thus physical points are only indivisible in appearance; mathematical points are so in reality but they are merely modalities; only metaphysical points or those of substance (constituted by forms or souls) are exact and real, and without them there would be nothing real, for without true unities there could not be multiplicity.

12. After having established these propositions I thought myself entering into port, but when I came to meditate on the union of the soul with the body I was as if cast back into the open sea. For I found no way of explaining how the body can cause anything to pass into the soul, or vice versa; nor how one substance can communicate with another created

substance. Descartes gave up the attempt on that point, as far as can be learned from his writings, but his disciples seeing that the common view was inconceivable, were of the opinion that we perceive the qualities of bodies because God causes thoughts to arise in the soul on the occasion of movements of matter; and when the soul wished to move the body in its turn they judged that it was God who moved it for the soul. And as the communication of motions again seemed to them inconceivable, they believed that God gave motion to a body on the occasion of the motion of another body. This is what they call the system of *Occasional Causes* which has been much in vogue on account of the beautiful remarks of the author of the *Search after Truth.*

13. It must be confessed that the difficulty has been well penetrated when the not-possible is stated, but it does not appear that it is done away with by explaining what actually takes place. It is indeed true that there is no real influence of one created substance upon another, speaking in metaphysical strictness, and that all things with all their realities are continually produced by the power of God; but in resolving problems it is not enough to employ a general cause and to call in what is called the *Deux ex Machina.* For when this is done and there is no other explanation which can he drawn from secondary causes, it is, properly, having recourse to miracle. In philosophy it is necessary to try to give reasons by making known in what way things are done by divine wisdom, in conformity to the idea of the subject concerned.

14. Being then obliged to admit that it is not possible for the soul or any true substance to receive any influence from without, if it be not by the divine omnipotence I was led insensibly to an opinion which surprised me but which appears inevitable and which has in truth great advantages and many beauties. It is this: it must then be said that God created the soul, or every other real unity, in the first place in such a way that everything with it

comes into existence from its own substance through perfect spontaneity as regards itself and in perfect harmony with objects outside itself. And that thus our internal feelings (i. e. those within the soul itself and not in the brain or finer parts of the body), being only phenomena consequent upon external objects or true appearances, and like well-ordered dreams, it is necessary that these internal perceptions within the soul itself come to it by its own proper original constitution, i. e. by the representative nature (capable of expressing beings outside itself by relation to its organs), which has been given it at its creation and which constitutes its individual character. This brings it about that each of these substances in its own way and according to a certain point of view, represents exactly the entire universe, and perceptions or impressions of external things reach the soul at the proper point in virtue of its own laws, as if it were in a world apart, and as if there existed nothing but God and itself (to make use of the manner of speaking of a certain person of great elevation of mind, whose piety is well known); there is also perfect harmony among all these substances, producing the same effects as if they communicated with each other by a transmission of kinds or of qualities, as philosophers generally suppose.

Farther, the organized mass, within which is the point of view of the soul, being expressed more nearly by it, finds itself reciprocally ready to act of itself following the laws of corporeal machines, at the moment when the soul wills it, without either one troubling the laws of the other, the nerves and the blood having just at that time received the impulse which is necessary in order to make them respond to the passions and perceptions of the soul; it is this mutual relationship, regulated beforehand in every substance of the universe, which produces what we call their intercommunication and alone constitutes the un ion between the soul and body. And we may understand from this now the soul has its seat in the

body by an immediate presence which could not be greater, for it is there as the unit is in the complex of units, which is the multitude.

15. This hypothesis is very possible. For why could not God give to a substance in the beginning a nature or internal force which could produce in it to order (as in a *spiritual or formal automaton*, *but free* here since it has reason to its share), all that which should happen to it; that is to say all the appearances or expressions it should have, and that without the aid of any creature? All the more as the nature of the substance necessarily demands and essentially includes a progress or change, without which it would not have power to act. And this nature of the soul, being representative, in a very exact (although more or less distinct) manner, of the universe, the series of representations which the soul will produce for itself will naturally correspond to the series of changes in the universe itself; as, in turn, the body has also been accommodated to the soul, for the encounters where it is conceived as acting from without, This is the more reasonable as bodies are only made for those spirits which are capable of entering into communion with God and of celebrating His glory. Thus from the moment the possibility of this *hypothesis of harmonies* is perceived, we perceive also that it is' the most reasonable and that it gives a marvellous idea of the harmony of the universe and of the perfection of the works of God.

16. This great advantage is also found in it, that instead of saying that we are FREE only in appearance and in a way practically sufficient, as many persons of ability have believed, it must rather be said that we are only enchained in appearance, and that according to the strictness of metaphysical expressions we are in a state of perfect independence as respects the influence of all other creatures. This again places in a marvellous light the immortality of the soul and the always uniform preservation of our individuality regulated perfectly by its own nature beyond the risk of all accidents from without, whatever appearance there

may be to the contrary. Never has a system so clearly proved our high standing. Every spirit, being like a separate world sufficient to itself, independent of every other creature, enclosing the infinite, expressing the universe, is as durable, as stable and as absolute as the universe of creatures itself. Therefore we ought always to appear in it in the way best fitted to contribute to the perfection of the society of all spirits, which makes their moral union in the city of God. Here is found also a new *proof of the existence of God,* which is one of surprising clearness. For this perfect harmony of so many substances which have no communication with each other, can only come from a common cause.

17. Besides all these advantages which render this system commendable, it can also be said that this is more than an hypothesis, since it hardly seems possible to explain the facts in any other intelligible manner, and since several great difficulties which have exercised the mind up to this time, seem to disappear of themselves as soon as this system is well understood. The customary ways of speaking can still be retained. For we can say that the substance, the disposition of which explains the changes in others in an intelligible manner (in this respect, that it may be supposed that the others have been in this point adapted to it since the beginning, according to the older of the decrees of God), is the one which must be conceived of as *acting* upon the others. Also the action of one substance upon another is not the emission or transfer of an entity as is commonly believed, and cannot be understood reasonably except in the way which I have just mentioned. It is true that we can easily conceive in matter both emissions and receptions of parts, by means of which we are right in explaining mechanically all the phenomena of physics; but as the material mass is not a substance it is apparent that action as regards substance itself can only be what I have just said.

18. These considerations, however metaphysical they may appear, have yet a marvellous use in physics in establishing the laws of motion, as our *Dynamics* can make clear. Tor it can be said that in the collision of bodies, each one suffers only by reason of its own elasticity, because of the motion which is already in it. And as to absolute motion, it can in no way be determined mathematically, since everything terminates in relations; therefore there is always a perfect equality of hypotheses, as in astronomy, so that whatever number of bodies may be taken it is arbitrary to assign repose of a certain degree of velocity to any one that may be chosen, without being refuted by the phenomena of straight, circular and composite motion. Nevertheless it is reasonable to attribute to bodies real movements, according to the supposition which explains phenomena in the most intelligible manner, since this description is in conformity to the idea of action which I have just established.

THE REPLY OF M. FOUCHER TO LEIBNITZ CONCERNING HIS NEW SYSTEM OF THE INTERACTION OF SUBSTANCES. 1695.

[From the French.]

ALTHOUGH YOUR SYSTEM is not new to me, sir, and although I made known to you, in part, my opinion in replying to a letter which you wrote me on this subject *more than ten years ago*, still I will not fail to tell you again what I think of it, since you ask me anew.

The first part aims only to make known in all substances the unities which constitute their reality and distinguish them from others, and form, to speak after the manner of the school, their *individuation;* this is what you remark *first* on the subject of matter or extension. I agree with you that it is right to inquire after *the unities which form the composition and the reality of extension*, for without this, as you very justly remark, *an always divisible extension is only a chimerical compound*, *the principles of which do not exist* since without unities no true multitude is possible. Nevertheless, I wonder that people are indifferent on this subject, *for the essential principles of extension cannot exist really.* In truth, points without parts cannot be in the universe, and two points joined together form no extension; it is impossible that any length can subsist without breadth, or any surface without depth. And it is of no use to bring forward physical points, for these points are extended and involve all the difficulties which we should like to avoid. But I will not longer delay on this subject on which you and I have already had a discussion in the *Journal* of the sixteenth of March, 1693, and of the third of August of the same year.

You introduce on the other hand another kind of unities which, strictly speaking, are unities of composition or of relation, and which respect the perfection or completion of a whole which, being organic, is destined for certain functions; for example, a clock is one, an animal is one; and you believe that you can give the name of substantial forms to the natural unities of animals and of plants, so that these unities shall form their individuation in distinguishing them from every other compound. It seems to me that you are right in giving animals a principle of individuation other than that which is usually given them, which is only through relation to external accidents. In reality this principle must be internal, as much on the part of their soul as of their body, but whatever disposition there may be in the organs of the animal, that does not suffice to render it sensible. For finally all this concerns merely the organic and mechanical composition, and I do not see that you are thereby justified in constituting a *sensitive principle in brutes differing substantially from that of men.* And after all it is not without reason that the Cartesians acknowledge that if we admit a sensitive principle capable of distinguishing good from evil, it is consequently necessary also to admit in them reason, discernment and judgment. So, allow me to say to you, sir, that this does not solve the difficulty, either.

We come to your concomitance which forms the principal and second part of your system. We will admit that God, that great artisan of the universe, can adjust all the organic parts of the body of a man so well that they shall be capable of producing all the movements which the soul joined to this body might wish to produce in the course of its life, without its having the power to change these movements or to modify them in any way. And, reciprocally, God can produce a contrivance in the soul (be it a machine of a new kind or not), by means of which all the thoughts and modifications which correspond to these movements shall arise successively at the same moment that the body shall perform its functions.

And I admit that this is not more impossible than to make two clocks agree so well and go so uniformly that at the moment when clock A shall strike twelve clock B also strikes, so that one would imagine that the two clocks are regulated by the same weight or the same spring. But after all, to what can this great artifice in substances serve if not to make men believe that the one acts upon the other, although this is not true? In reality, it seems to me that this system is hardly more advantageous than that of the Cartesians; and if we are right in rejecting theirs because it uselessly supposes that God, considering the movements which he himself produces in the body, produces also in the soul thoughts which correspond to these movements, as if it were not more worthy of him to produce all at once the thoughts and modifications of the soul without needing bodies to serve as regulators and so to speak, inform him what he ought to do — shall we not have reason to inquire of you why God does not content himself with producing all the thoughts and modifications of the soul (whether he do it immediately or by contrivance, as you will), without there being useless bodies which the mind can neither move nor know? Even to such an extent that although no movement should take place in the body, the soul would not cease to think always that there was one; just as those who are asleep think that they are moving their members and are walking, when nevertheless those members are at rest and do not move at all. Thus, during the waking state, souls would remain always persuaded that their bodies would move according to their desires, although, nevertheless, these vain and useless masses would be inactive and would remain in a continuous lethargy. Truly, sir, do we not see that these opinions are made expressly and that these *ex post facto* systems have been invented only to save certain principles which have been adopted? In fact, the Cartesians, supposing that there is nothing in common between spiritual and corporeal substances, cannot explain how one acts on the other; and consequently they are compelled to say what they do. But

you, sir, who could free yourself by other ways, I am surprised that you embarrass yourself with their difficulties. For who does not see that when a balance is in equilibrium and inactive, if a new weight is added to one of the sides, forthwith movement appears and one of the counterweights makes the other rise in spite of the effort which the latter makes to descend. You conceive that *material beings are capable of efforts and of movement;* and it follows very naturally that the strongest effort must surpass the weakest. On the other hand you recognize also that *spiritual beings may make efforts;* and as there is no effort which does not suppose some resistance, it is necessary either that this resistance be stronger or weaker; if stronger, it overcomes; if weaker, it yields. Now it is not impossible that the mind making an effort to move the body finds it endowed with a contrary effort which resists — sometimes more, sometimes less, and this suffices to cause it to suffer thereby. It is thus St. Augustine, in his books on music, explains of set purpose the aetion of spirits on bodies.

I know that there are many other questions to be raised before resolving from first principles all those which might be agitated; so true is it that one ought to observe the laws of the academicians, the second of which forbids the calling in question those things which one easily sees cannot be decided, such as are almost all those of which we have just spoken; not that these questions are absolutely insoluble but because they can only be solved in a certain order, which requires that philosophers begin by agreeing as to the infallible mark of truth, and confine themselves to demonstrating from first principles; and by waiting, one can always separate that which is conceived clearly and sufficiently from other points or subjects which embrace some obscurity.

This, sir, is what I can say at present of your system, without speaking of the other fine subjects of which you there incidentally treat, and which would merit particular discussion.

EXPLANATION OF THE NEW SYSTEM CONCERNING THE COMMUNICATION BETWEEN SUBSTANCES, TO SERVE AS A REPLY TO THE MEMOIR OF M. FOUCHER INSERTED IN THE "JOURNAL DES SAVANS" OF SEPTEMBER 12, 1695. 1696.

[From the French.]

I REMEMBER, SIR, that I believed I was fulfilling your wishes in communicating to you, many years ago, my philosophical hypothesis, although I assured you at the same time that I had not yet made up my mind to avow it. I asked for your opinion of it in exchange, but I do not remember to have received any objections from you; otherwise, teachable as I am, I should not have given you occasion to make the same objections to me twice. However, after the publication, they still come *apropos.* For I am not one of those in whom a prepossession takes the place of reason, as you will experience when you are able to bring forward some precise and weighty arguments against my opinions, a thing which apparently has not been your design on this occasion. You have wished to speak as a skillful academician and thus give opportunity for a thorough examination of these subjects.

I have not wished to explain here the principles of extension, but those of *effective extension* or of corporeal mass; and these principles, in my opinion, are *real unities;* that is, substances endowed with true unity. The unity of a clock, of which you make mention, is entirely different, with me, from that of an animal, which latter is capable of being a substance endowed with a true unity, like what we call the *ego* in us; whereas a clock is nothing but an assemblage. It is not in the disposition of the organs that I place the sensitive principle of animals, and I admit that it concerns only the

corporeal mass. So it seems that you do not make me out to be wrong when I demand true unities and when for this reason I rehabilitate substantial forms. But when you seem to say that the soul of brutes must possess reason if feeling is ascribed to it you make use of a conclusion, the force of which I do not see.

You admit, with praiseworthy sincerity, that my hypothesis of harmony or of concomitance is possible. But you do not conceal a certain repugnance to it; undoubtedly because you have believed it purely arbitrary, not having been informed that it follows from my view of unities, for therein everything is connected. You demand then, sir, what purpose all this contrivance which I attribute to the author of nature may serve? As if one could attribute too much of it to him, and as if this exact correspondence which substances have among themselves by laws of their own which each one has received in the beginning, was not a thing admirably beautiful in itself and worthy of its author. You ask, too, what advantage I find herein. I might refer to what I have already said of it; nevertheless, I reply, in the first place, that when a thing cannot but be it is not necessary that, in order to admit it, we should demand of what use it is. Of what use is the incommensurability of the side with the diagonal? I reply, in the second place, that this correspondence serves to explain the communication of substances and the union of the soul with the body by laws of nature established beforehand, without having recourse either to a transmission of species, which is inconceivable, or to fresh assistance from God, which appears very unsuitable. For it must be understood that as there are laws of nature in matter, so there are like laws in souls or forms, and these laws effect what I have just stated.

I shall be asked, farther, whence it comes that God does not content himself with producing all the thoughts and *modifications* of the soul without these *useless* bodies which the soul, they say, can neither *move nor*

know? The reply is easy. It is that God has willed that there should be more rather than fewer substances, and that he has thought it good that these *modifications* of the soul should answer to something external. There is no *useless* substance; they all cooperate in the design of God. I am unwilling, also, to admit that the soul *does not know* the body at all, although this knowledge is gained without the influence of one upon the other. I should even have no difficulty in saying that the soul *moves* the body; and as a Copernican speaks truly of the rising of the sun, a Platonist of the reality of matter, a Cartesian of the reality of sensible qualities, provided that he is rightly understood, so I believe that it is quite true to say that substances act, the one on the other, provided that it be understood that one is the cause of the changes in the other in consequence of the laws of harmony. As to the objection concerning the *lethargy* of bodies, that they would be inactive while the soul would think them in movement, this could not be, because of this same unfailing correspondence which the divine wisdom has established. I know no *vain*, *useless and inactive masses* of which you speak. There is action everywhere, and I establish that fact better than the received philosophy does, because I believe that there is no body without movement, nor substance without effort.

I do not understand in what the objection consists contained in the words, “In truth, sir, do not we see that these opinions are made expressly, and that these *ex post facto* systems have been invented only in order to save certain principles?” All the hypotheses are made *expressly*, and all the systems follow *after,* to save phenomena or appearances; but I do not see what the principles are of which I am said to be *prepossessed,* and which I wish to *save.* If this means that I am led to my hypothesis by *a priori* reasons or by certain principles, as is in truth the fact, it is rather praise for the hypothesis than an objection. It is usually sufficient that a hypothesis prove itself *a posteriori*, because it satisfies the phenomena; but when there

are also reasons elsewhere and *a priori*, it is so much the better. But perhaps this means that having invented a new opinion I have been very glad to employ it, in order to give myself the airs of an innovator, rather than because I recognized any usefulness in it. I do not know, sir, whether you have a poor enough opinion of me to attribute these thoughts to me. For you know that I love the truth and that if I affected novelties so much I should be in more haste to produce them, especially those the solidity of which is recognized. But in order that those who do not know me so well may not give your words a meaning we would not like, it will be sufficient to say that in my opinion it is impossible to explain otherwise *continual action* conformable to the laws of nature, and that I believe that the usefulness of my hypothesis will be recognized by the difficulty which the most sharp-sighted philosophers of our time have found in the communication between minds and bodies, and even of corporeal substances among themselves; and I do not know if you have not found some there yourself. It is true that there are, in my opinion, efforts in all substances, but these efforts are properly only in the substance itself; and what follows in the others is only in virtue of a *pre-established harmony* (if I may be permitted to use this word), and in no wise by a real influence or by a transmission of some property or quality. As I have explained what action and passion are, you may infer also the meaning of effort and resistance.

You say you know, sir, that there are many other questions to be asked before those which we have just agitated can be decided. But perhaps you will find that I have already asked them, and I do not know whether your academicians have employed with greater rigor or with more effect than I what there is of good in their method. I highly approve of seeking to demonstrate truths from first principles; it is more useful than is thought, and I have put this precept into practice. So I approve of what you say on that head, and I would that your example would bring our philosophers to

think of it as they should. I will add another reflection which seems to me important in making the reality and usefulness of my system better understood. You know that Descartes believed that the same quantity of motion is preserved in bodies. It has been shown that he was mistaken on that point, but I have made it apparent that it is always true that the same moving force, for which he had substituted the quantity of movement, is preserved. However, the changes which take place in bodies in consequence of the modifications of the soul embarrassed him, because they seemed to violate this law. He believed that he had found an expedient, which in truth is ingenious, by saying that we must distinguish between movement and direction, and that the soul cannot increase or diminish the moving force, but that it changes the direction or determination of the course of the animal spirits, and that it is in this way that voluntary movements take place. It is true that he was unwilling to explain how the soul acts to change the course of bodies, that which is as inconceivable as to say that it gives them movement, unless recourse is had with me to the pre-established harmony. But it should be known that there is *another law of nature,* which I have discovered and demonstrated, and which Descartes did not know. It is that not only is the same quantity of moving force preserved, but also the *same quantity of direction towards whatever side in the world is taken.* That is to say, drawing any straight line you please and taking also such and as many bodies as you please, you will find, in considering all these bodies together, without omitting any of those which act upon any one of those you have taken, that there will always be the same quantity of progress on the same side in all the parallels to the right line which you have taken, taking care to estimate the sum of the progress in omitting that of the bodies which move in the direction opposite to that of the bodies which move in the direction taken. This law, being just as beautiful and just as general as the other, no more deserves to be violated than the other; and this is avoided by my

system, which preserves the force and the direction, and in a word all the natural laws of bodies, in spite of the changes which take place there, in consequence of those of the soul.

SECOND EXPLANATION OF THE SYSTEM OF THE COMMUNICATION BETWEEN SUBSTANCES. 1696.

[From the French.]

BY YOUR REFLECTIONS, sir, I see clearly that the thought which one of my friends has published in the *Journal de Paris* has need of explanation.

You do not understand, you say, how I could prove that which I advanced concerning the communication or harmony of two substances so different as the soul and the body. It is true that I believe that I have found the means of doing so, and this is how I propose to satisfy you. Imagine two clocks or watches which agree perfectly. Now, this may take place in *three ways.* The *first* consists in a mutual influence; the *second* is to have a skillful workman attached to them who regulates them and keeps them always in accord; the *third* is to construct these two clocks with so much art and accuracy as to assure their future harmony. Put now the soul and the body in place of these two clocks; their accordance may be brought about by one of these three ways. The way of influence is that of common philosophy, but as we cannot conceive of material particles which may pass from one of these substances into the other, this view must be abandoned. The way of the continual assistance of the creator is that of the system of occasional causes; but I hold that this is to make a *Deus ex Machina* intervene in a natural and ordinary matter, in which, according to reason, he ought not to cooperate except in the way in which he does in all other natural things. Thus there remains only my hypothesis; that is, the way of harmony. From the beginning God has made each of these two substances of such a nature that merely by following its own peculiar laws, received with its being, it nevertheless accords with the other, just as if there were a

mutual influence or as if God always put his hand thereto in addition to his general cooperation. After this I have no need of proving anything, unless you wish to require me to prove that God is sufficiently skillful to make use of this prevenient contrivance, examples of which we see even among men. Now, taking for granted that he can do it, you easily see that this is the way most beautiful and most worthy of him. You suspected that my explanation would be opposed to the very different idea which we have of the mind and of the body; but you will presently clearly see that no one has better established their independence. For while it has been necessary to explain their communication by a kind of miracle, occasion has always been given to many people to fear that the distinction between the body and the soul was not as real as was believed, since in order to maintain it it was necessary to go so far. I shall not be at all sorry to sound enlightened persons concerning the thoughts which I have just explained to you.

THIRD EXPLANATION. EXTRACT FROM A LETTER OF LEIBNITZ ON HIS PHILOSOPHICAL HYPOTHESIS AND THE CURIOUS PROBLEM PROPOSED BY HIS FRIENDS TO THE MATHEMATICIANS. 1696.

[From the French.]

SOME WISE AND penetrating friends, having considered my novel hypothesis concerning the great question of the union of soul and body, and having found it of importance have besought me to give some explanations of the difficulties which have been raised and which come from the fact that it has not been well understood.

I have thought that the matter might be rendered intelligible to every sort of mind by the following comparison:

Imagine two clocks or two watches which agree perfectly. Now this may happen in *three ways.* The first consists in the mutual influence of one clock on the other; the second, in the care of a man who attends thereto; the third, in their own accuracy.

The *first way*, which is that of influence, has been experimented on by the late M. Huygens, to his great astonishment. He had two large pendulums attached to the same piece of wood; the continual vibrations of these pendulums communicated similar vibrations to the particles of wood; but these different vibrations not being able to subsist very well in their order and without hindering each other, unless the pendulums agreed, it happened by a kind of marvel that even when their beats had been purposely disturbed they soon came again to beat together, almost like two chords which are in unison.

The second way of making two clocks, even although poor, always accord, would be to have a skillful workman who should see to it that they are kept in constant agreement. This is what I call the way of assistance.

Finally, the *third way* would be to make in the first place these two clocks with so much art and accuracy that we might be assured of their future accordance. This is the way of the pre-established agreement.

Put now the sold and the body in the place of these two clocks. Their harmony or sympathy will take place by one of these three methods. The way of *influence* is that of common philosophy; but as we cannot conceive of material particles or properties, or immaterial qualities, which can pass from one of these substances into the other, we are obliged to abandon this view. The way of *assistance* is that of the system of occasional causes; but I hold that this is making a *Deus ex Machina* intervene in a natural and ordinary matter, when, according to reason, he ought not to intervene except in the manner in which he cooperates in all the other affairs of nature.

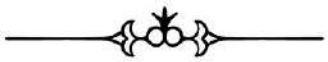
Thus, there remains only my hypothesis; that is, the way of a harmony pre-established by a prevenient divine contrivance, which from the beginning has formed each of these substances in a way so perfect and regulated with so much accuracy that merely by following laws of its own, received with its being, it nevertheless agrees with the other, just as if there were mutual influence, or as if God in addition to his general cooperation constantly put his hand thereto.

After this I do not think I need to prove anything, unless it be that you wish me to prove that God has everything necessary to making use of this prevenient contrivance, examples of which we see even among men, according to their skill. And supposing that he can do it you see well that this is the most admirable way and the one most worthy of him.

It is true that I have yet other proofs but they are more profound, and it is not necessary to state them here.

REFLECTIONS ON LOCKE'S ESSAY ON HUMAN UNDERSTANDING. 1696.

[From the French.]



I FIND so many marks of unusual penetration in what Mr. Locke has given us on the *Human Understanding* and on *Education*, and I consider the matter so important, that I have thought that the time would not be badly employed which I should give to such profitable reading; all the more as I have myself deeply meditated concerning that which has to do with the foundations of our knowledge. It is for this reason that I have jotted down on this sheet some of the reflections which have occurred to me in reading his *Essay on the Understanding.* Of all researches, there is none more important, because it is the key to all others.

The first book considers mainly the principles said to be born with us. Mr. Locke does not admit them any more than he does *innate ideas.* He has undoubtedly had good reasons for putting himself in opposition on this point to ordinary prejudices, for the name of ideas and principles is extremely abused. Common philosophers make themselves principles at their fancy; and the Cartesians, who profess more accuracy, do not fail to intrench themselves behind so-called ideas of *extension*, of *matter* and of the *soul*, wishing in this way to exempt themselves from the necessity of proving what they advance, on the pretext that those who will meditate on these ideas will find in them the same thing that they do; that is to say, that those who will accustom themselves to their manner of thinking will have the same prepossessions, which is very true.

My opinion is, then, that nothing ought to be taken as primitive principles except *experiences* and the axiom of *identity*, or, what is the same

thing, *contradiction*, which is primitive, since otherwise there would be no difference between truth and falsehood; and since all researches would cease at the start if to say yes or no were indifferent. We cannot, therefore, prevent ourselves from supposing this principle as soon as we wish to reason. All other truths are capable of proof, and I highly esteem Euclid's method which, without stopping at what would be thought to be sufficiently proved by the so-called ideas, has proved, for example, that in a triangle one side is always less than the other two together. Yet Euclid was right in taking some axioms for granted, not as if they were truly primitive and undemonstrable, but because he would have come to a standstill if he had wished to draw conclusions only after an accurate discussion of principles. Thus he judged it proper to content himself with having pushed the proofs up to this small number of propositions, so that it can be said that if they are true, all that he says is also true. He has left to others the trouble of demonstrating these principles themselves which, besides, are already justified by experience; but in these matters this does not content us. This is why Appolonius, Proclus and others have taken the trouble to demonstrate some of Euclid's axioms. This manner of proceeding ought to be imitated by philosophers in order to arrive finally at some established positions, even if they be but provisional, in the way of which I have just spoken.

As for ideas, I have given some explanation of them in a short essay entitled *Meditationes de Cognitions, Veritate et Ideis*, and I could have wished that Mr. Locke had seen and examined it; for I am one of the most docile of men, and nothing is more fitted to advance our thoughts than the considerations and remarks of persons of merit, when they are made with care and sincerity. Here I shall only say that true or real ideas are those of the possibility of whose fulfilment we are assured; the others are doubtful, or (in case of proof of impossibility), chimerical. How the possibility of ideas is proved as much *a priori* by demonstrations, by making use of the

possibility of other simpler ideas, as *a posteriori* by experience; for what is, cannot fail to be possible. But primitive ideas are those the possibility of which is undemonstrable, and which indeed are nothing else than the attributes of God.

As regards the question, *whether there are ideas and truths created with as,* I do not consider it absolutely necessary for the beginning nor for the practice of the art of thinking, to decide it; whether they all come to us from without, or whether they come from us, we will reason correctly if we observe what I have just said on this subject and if we proceed with order and without prejudice. The question concerning the *origin of oar ideas and of our maxims* is not preliminary in philosophy, and we must have made great progress to be able to answer it well. I think, however, that I can say that our ideas, even those of sensible things, come from within the soul *[de notre propre fond],* of which you may judge by what I have published concerning *the nature and interaction of substances* and what is called *the union of the soul with the body.* For I have found that these things had not been well understood. I am in no wise in favor of the *Tabula rasa* of Aristotle; and there is something sound in what Plato called *reminiscence.* There is even something more, for we have not only a *reminiscence* of all our past thoughts but also a *presentiment* of all our future thoughts. It is true that it is confusedly and without distinguishing them, very much as when I hear the sound of the ocean I hear that of all the waves In particular which make up the total sound, although it is without discerning one wave from another. And it is true in a certain sense, which I have explained, that not only our ideas but also our feelings, spring from within our own soul, and that the soul is more independent than is thought, although it is always true that nothing takes place in it which is not determined and that nothing is found in creatures which God does not continually create.

In the *second book*, which goes into the details of ideas, I confess that Mr. Locke's reasons for proving that the *soul is sometimes without thought* do not seem to me convincing, unless he gives the name of *thoughts* to only those perceptions sufficiently noticeable to be distinguished and retained. I hold that the soul and even the body is never without action, and that the soul is never without some perception. Even in dreamless sleep we have some confused and dim feeling of the place where we are and of other things. But even if experience should not confirm it, I believe that it may be demonstrated. It is very much as when we cannot prove absolutely by experience whether there is a vacuum in space, and whether there is rest in matter. And yet questions of this kind seem to me, as well as to Mr. Locke, to be decided demonstratively.

I assent to the difference which he makes with great reason between *matter* and *space.* But as concerns the vacuum, many learned people have believed in it. Mr. Locke is of this number. I was almost persuaded of it myself, but I gave it up long ago. And the incomparable Mr. Huygens, who was also for a vacuum and for the atoms, began at last to reflect upon my reasons, as his letters can bear witness. The proof of a vacuum, taken from motion, of which Mr. Locke makes use, supposes that body is originally *hard*, and that it is composed of a certain number of inflexible parts. For in this case it would be true, whatever finite number of atoms might be taken, that motion could not take place without a vacuum, but all the parts of matter are divisible and pliable.

There are some other things in this second book which arrest me; for example, when it is said, chapter XVII, *that infinity is to be attributed only to Space, Time and Number.* I believe with Mr. Locke that, strictly speaking, it may be said that there is no space, no time and no number which is infinite, but that it is only true that however great may be a space, a time or a number, there is always another larger than it, *ad infinitum;* and that thus

the true *infinite* is not found in a whole made up of parts. It is none the less, however, found elsewhere; namely, in the *absolute*, which is without parts and which has influence upon compound things because they result from the limitation of the absolute. Hence the *positive infinite* being nothing else than the absolute, it may be said that there is in this sense a positive idea of the infinite, and that it is anterior to that of the finite. For the rest, by rejecting a composite infinite, we do not deny what the geometricians, and especially the excellent Mr. Newton, prove *de Seriebus infinitis.*

As for what is said, chapter XXX, *de ideis adaequatis*, it is permissible to give to the terms the signification one finds apropos. Nevertheless, without finding fault with Locke's meaning, I put degrees in ideas, according to which I call those *adequate* in which there is nothing more to explain very much as in numbers. Now all ideas of sensible qualities, as of light, color, heat, not being of this nature, I do not count them among the *adequate*; also it is not through themselves nor *a priori*, but by experience that we know their reality or possibility.

There are again many good things in the *third book*, where he treats of *words* or *terms.* It is very true that everything cannot be defined, and that sensible qualities have no *nominal definition* and may be called primitive in this sense; but they can none the less receive a *real definition.* I have shown the difference between these two kinds of definition in the meditation quoted above. The *nominal definition* explains the name by the marks of the thing; but the *real definition* makes known *a priori* the possibility of the thing defined. For the rest, I heartily approve of Mr. Locke's doctrine concerning the *demonstrability of moral truths.*

The fourth or last book, which treats of the knowledge of truth, shows the use of what has just been said. I find in it, as well as in the preceding books, numberless beautiful reflections. To make fitting remarks upon them would be to make a hook as large as the work itself. It seems to me that the

axioms in it are a little less considered than they deserve to be. It is apparently because, with the exception of those of the mathematicians, there are not ordinarily found any which are important and solid. I have tried to remedy this defect. I do not despise identical propositions, and I have found that they are of great service even in analysis. It is very true that we know our own existence by an immediate intuition, and that of God, by demonstration; and that a mass of matter, the parts of which are without perception, cannot make a whole which thinks. I do not despise the argument, invented some centuries ago by Anselm, which proves that the perfect being must exist; although I find something lacking in this argument, because it takes for granted that the perfect being is possible. For if this one point were proved in addition the whole demonstration would be complete.

As for the knowledge of other things, it is very well said that experience alone does not suffice for advancing sufficiently in physics. A penetrating mind will draw more conclusions from some very ordinary experiences than another could draw from the most choice; besides there is an art of experimenting and of interrogating, so to speak, nature. Yet it is always true that progress cannot be made in the details of physics except in proportion as one has experience.

Mr. Locke is of the opinion, held by many able men, that the forms of logic are of little use. I should be almost of the opposite opinion; and I have often found that paralogisms, even in mathematics, are faults of form. Mr. Huygens has made the same observation. Much might be said on this point, and many excellent things are despised because the use of which they are capable is not made of them. We are prompted to despise what we have learned in the schools. It is true that we there learn many useless things, but it is good to exercise the function della Crusca, that is, to separate the good from the bad. Mr. Locke can do it as well as anyone whatsoever; and in

addition he gives us important thoughts of his own. He is not only an assayer, but he is also a transmuter, by the augmentation which he makes of good metal. If he continued to make a present of it to the public we should be greatly indebted to him.

ON THE ULTIMATE ORIGIN OF THINGS. 1697.

[From the Latin.]

IN ADDITION TO the world or aggregate of finite things, there is some unique Being who governs, not only like the soul in me, or rather like the Ego itself in my body, but in a much higher relation. For one Being dominating the universe not only rules the world but he creates and fashions it, is superior to the world, and, so to speak, extra mundane, and by this very fact is the ultimate reason of things. For the sufficient reason of existence can be found neither in any particular thing nor in the whole aggregate or series. Suppose a book on the elements of geometry to have been eternal and that others had been successively copied after it, it is evident that, although we might account for the present book by the book which was its model, we could nevertheless never, by assuming any number of books whatever, reach a perfect reason for them; for we may always wonder why such books have existed from all time; that is, why books are and why they are thus written. What is true of books is also true of the different states of the world, for in spite of certain laws of transformation a succeeding state is in a certain way only a copy of the preceding, and to whatever anterior state you may go back you will never find there a perfect reason why, forsooth, there is any world at all, and such a world as exists. For even if you imagine the world eternal, nevertheless since you posit nothing but a succession of states, and as you find a sufficient reason for them in none of them whatsoever, and as any number of them whatever does not aid you in giving a reason for them, it is evident that the reason must be sought elsewhere. For in eternal things it must be understood that even where there is no cause there is a reason which, in perduring things, is necessity itself or essence,

but in the series of changing things, if it were supposed that they succeed each other eternally, this reason would be, as will soon be seen, the prevalence of *inclinations* where the reasons are not necessitating (by an absolute or metaphysical necessity the opposite of which would imply contradiction), but inclining. From which it follows that by supposing the eternity of the world, an ultimate extramundane reason of things, or God, cannot be escaped.

The reasons of the world, therefore, lie hidden in something extramundane different from the chain of states or series of things, the aggregate of which constitutes the world. We must therefore pass from physical or hypothetical necessity, which determines the posterior states of the world by the prior, to something which is absolute or metaphysical necessity, the reason for which cannot he given. For the present world is necessary, physically or hypothetically, but not absolutely or metaphysically. It being granted, indeed, that the world is such as it is, it follows that things may hereafter be such as they are. But as the ultimate origin must be in something which is metaphysically necessary, and as the reason of the existing can only be from the existing, there must exist some one being metaphysically necessary, or whose essence is existence; and thus there exists something which differs from the plurality of beings or from the world, which, as we have recognized and shown, is not metaphysically necessary.

But in order to explain a little more clearly how, from eternal or essential; or metaphysical truths, temporary, contingent or physical truths arise, we ought first to recognize that from the very fact that something exists rather than nothing, there is in possible things, that is, in the very possibility or essence, a certain need of existence, and, so to speak, some claim to existence; in a word, that essence tends itself towards existence. Whence it further follows that all possible things, whether expressing

essence or possible reality, tend by equal right toward existence, according to their quantity of essence or reality, or according to the degree of perfection which they contain, for perfection is nothing else than quantity of essence.

Hence it is most clearly understood that among the infinite combinations of possibles and possible series, that one exists by which the most of essence or of possibility is brought into existence. And indeed there is always in things a principle of determination which is to be taken from the greatest and the smallest, or in such a way that the greatest effect is obtained with the least, so to speak, expenditure. And here the time, place, or as many say, the receptivity or capacity of ‘the world may be considered as the expenditure or the ground which can he most easily built upon, whereas the varieties of forms correspond to the commodiousness of the edifice and the multiplicity and elegance of its chambers. And it is with it in this respect as with certain games where all the spaces on a table are to be filled according to determined laws. Now, unless a certain skill be employed, you will be finally excluded by unfavorable spaces and forced to leave many more places empty than you can or wish. But there is a certain very easy way of filling the most possible space. Just as, therefore, if it is resolved to make a triangle, there being no other determining reason, it commonly happens that an equilateral results; and if it is resolved to go from one point to another without any further determination as to the way, the easiest and shortest path will be chosen; so it being once posited that being is better than not being, or that there is a reason why something should be rather than nothing, or that we must pass from the possibility to the act, it follows that even in the absence of every other determination the quantity of existence is as great as possible, regard being had to the capacity of the time and of the place (or to the possible order of existence), exactly as the squares are disposed in a given area in such a way that it shall contain the greatest

number of them possible. From this it is now marvellously understood how in the very origin of things a sort of divine mathematics or of metaphysical mechanism was employed, and how the determination of the greatest quantity of existence takes place. It is thus that from all angles the determined angle in geometry is the right angle, and that liquids placed in heterogeneous positions take that form which has the most capacity, or the spherical; but especially it is thus that in ordinary mechanics itself, when several heavy bodies strive together the motion which results constitutes, on the whole, the greatest descent. For just as all the possibles tend by equal right to exist by reason of reality, so all weights tend by an equal right to descend by reason of their gravity; and as here a movement is produced which contains the greatest possible descent of heavy bodies, so there a world is produced in which is found realized the greatest number of possibles.

And thus we now have physical necessity from metaphysical; for although the world be not metaphysically necessary, in the sense that its contrary implies a contradiction or a logical absurdity, it is nevertheless physically necessary, or determined in such a way that its contrary implies imperfection or moral absurdity. And as possibility is the principle of essence, so perfection or the degree of essence (through which the greatest possible number is at the same time possible), is the principle of existence. Whence at the same time it is evident that the author of the world is free, although he makes, all things determinately; for he acts according to a principle of wisdom or of perfection. Indeed indifference arises from ignorance, and the wiser one is, the more determined one is to the highest degree of perfection.

But, you will say, however ingenious this comparison of a certain determining metaphysical mechanism with the physical mechanism of heavy bodies may appear, nevertheless it fails in this, that heavy bodies

truly exist, whereas possibilities and essences prior to existence or outside of it are only fancies or fictions in which the reason of existence cannot be sought. I answer, that neither these essences nor these so-called eternal truths, are fictious but that they exist in a certain region of ideas, if I may thus speak, that is in God himself, the source of all essences and of the existence of all else. And the existence of the actual series of things shows sufficiently of itself that my assertion is not gratuitous. For since the reason is not found in this series, as we have shown above, but must be sought in metaphysical necessities or eternal truths, and since that which exists can only come from that, which existed, as we have remarked above, eternal truths must have their existence in a certain subject absolutely and metaphysically necessary, that is in God, through whom those things which otherwise would be imaginary, are, to speak barbarously but significantly, realized.

And in truth we discover that everything is done in the world according to the laws, not only geometrical but also metaphysical, of eternal truths; that is, not only according to material necessities, but also according to formal necessities; and this is true not only generally in that which concerns the reason, which we have just explained, of a world existing rather than non-existing, and existing thus rather than otherwise (a reason which can only be found in the tendency of the possible to existence); but if we descend to the special we see the metaphysical laws of cause, of power, of action holding good in admirable manner in all nature, and prevailing over the purely geometrical laws themselves of matter, as I found in accounting for the laws of motion: a thing which struck me with such astonishment that, as I have explained more at length elsewhere, I was forced to abandon the law of the geometrical composition of forces which I had defended in my youth when I was more materialistic.

Thus, therefore, we have the ultimate reason of the reality, as well of essences as of existences, in a Being who is necessarily much superior and anterior to the world itself, since it is from him that not only the existences which this world contains, but also the possibles themselves derive their reality. And this reason of things can be sought only in a *single* source, because of the connection which they all have with one another. But it is evident that it is from this source that existing things continually emanate, that they are and have been its products, for it does not appear why one state of the world rather than another, the state of to-day rather than that of to-morrow, should come from the world itself. We see, also, with the same clearness, how God acts, not only physically but freely; how the efficient and final cause of things is in him, and how he manifests not only his greatness and his power in the construction of the machine of the world, but also his goodness and his wisdom in the creation. And in order that no one should think that we confound here moral perfection or goodness with metaphysical perfection or greatness, or that the former is denied while the latter is granted, it must be known that it follows from what has been said that the world is most perfect, not physically, or, if you prefer, metaphysically, because that series of things is produced in which there is the most reality in action, but also that it is most perfect morally, because really moral perfection is physical perfection for souls themselves. Thus the world is not only the most admirable machine, but in so far as it is composed of souls, it is also the best republic, through which as much happiness or joy is brought to souls as is possible, in which their physical perfection consists.

But, you will say, we experience the contrary in this world, for often good people are very unhappy, and not only innocent brutes but also innocent men are afflicted and even put to death with torture; finally, the world, if you regard especially the government of the human race,

resembles a sort of confused chaos rather than the well ordered work of a supreme wisdom. This may appear so at the first glance, I confess, but if you examine the thing more closely, it evidently appears from the things which have been alleged, that the contrary should be affirmed; that is, that all things and consequently souls attain to the highest degree of perfection possible. And in truth it is not proper to judge before having examined, as the jurisconsults say, the whole law. We know only a very small part of the eternity which extends into immensity; for the memory of the few thousands of years which history transmits to us are indeed a very little thing. And yet from an experience so short we dare to judge of the immense and of the eternal, like men who, born and brought up in a prison, or, if you prefer in the subterranean salt mines of the Sarmatae, think that there is no other light in the world than the lamp whose feeble gleam hardly suffices to direct their steps. Let us look at a very beautiful picture, and let us cover it in such a way as to see only a very small part of it, what else will appear in it however closely we may examine it and however near we may approach to it, except a certain confused mass of colors without choice and without art? And yet when we remove the covering and regard it from the proper point of view we will see that what appeared thrown on the canvas at haphazard has been executed with the greatest art by the author of the work. What the eyes discover in the picture, the ears discover in music. The most illustrious composers often introduce discords into their harmonies, in order to excite and pique, so to speak, the listener, who, anxious as to the outcome, is all the more pleased when soon all things are restored to order. Just as we rejoice to have passed through slight dangers and experienced small ills, whether because of a feeling of egotism, or because we find pleasure in the frightful images which tight-rope dances or leapings between swords present; so we partly loose laughing children, pretending to throw them far away from us, like the ape which, having taken Christian,

king of the Danes, while still an infant wrapped in swaddling clothes, carried him to the top of the roof, and when everybody was frightened brought him back laughing, safe and sound to his cradle. According to the same principle, it is insipid always to eat sweetmeats; we must mingle with them sharp, acid and even bitter things, which excite the taste. He who has not tasted bitter things has not merited sweet things and even will not appreciate them. It is the law even of joy that pleasure be not uniform, for it engenders disgust, renders us stupid and not joyous.

As to what we said, that a part may he disturbed without prejudice to the general harmony, it must not be understood as meaning that no account is made of the parts, or that it suffices that the entire world be perfect in measure, although it might happen that the human race should be unhappy, and that there should be in the universe no regard for justice, no heed taken of our lot, as some think who do not judge rightly enough of the whole of things. For it must be known that as in a well-constituted republic as much care as possible is taken of the good of the individual, so the universe cannot be perfect if individual interests are not protected as much as the universal harmony will permit. And here a better law could not be established than the very law of justice which wills that each one participate in the perfection of the universe and in a happiness of his own proportioned to his own virtue and to the good will he entertains toward the common good, by which that which we call the charity and love of God is fulfilled, in which alone, according to the judgment of the wisest theologians, the force and power of the Christian religion itself consists. And it ought not appear astonishing that so large a part should be given to souls in the universe since they reflect the most faithful image of the supreme Author, and hold to him not only the relation of machine to artificer, but also that of citizen to prince; and they are to continue as long as the universe itself; and

in a manner they express and concentrate the whole in themselves so that it can be said that souls are whole parts.

As regards especially the afflictions of good people, we must hold for certain that there results for them a greater good, and this is not only theologically but physically true. So grain cast into the ground suffers before producing its fruit. And we may affirm, generally, that afflictions, temporarily evil, are in effect good, since they are short cuts to greater perfections. So in physics, liquors which ferment slowly take more time also to improve; whereas those the agitation of which is greater, reject certain parts with more force and are more promptly improved.

And we might say of this that it is retreating in order the better to leap forward *(qu'on recede, pour mieux sauter).*

We should therefore regard these considerations not merely as agreeable and consoling, but also as most true. And, in general, I feel that there is nothing truer than happiness, and nothing happier nor sweeter than truth.

REPLY TO REFLECTIONS, FOUND IN THE "JOURNAL DES SAVONS."

OF THIS YEAR, RELATING TO THE CONSEQUENCES OF CERTAIN

PASSAGES OF THE PHILOSOPHY OF DESCARTES. 1697.

[From the French.]

I AM accused of *wishing to establish my reputation on the ruins of that of Descartes.* I have a right to complain of this. Very far from wishing to ruin the reputation of this great man, I find that his real merit is not sufficiently known, because what is most excellent in him is not enough considered' and imitated. Men fasten on the weakest passages because these are most easily understood by those who are not willing to give themselves the trouble of thinking profoundly and who yet would like to understand the foundation of things. This is why, to my great regret, his partisans add almost nothing to his discoveries, and this is the usual effect of the sectarian spirit in philosophy. As all my views are intent only upon the public good, I have said something from time to time to arouse them, well knowing that their penetration would lead them very far, if they did not believe that their master had done enough. I have always declared that I esteem Descartes exceedingly; there are few who approach him in genius. I know but Archimides, Copernicus, Galileo, Kepler, Jung, Huygens, Newton, and a few others of such force; to whom Pythagoras, Democritus, Plato, Aristotle, Suisset, Cardan, Gilbert, Verulam, Campanella, Harvey, Pascal, and some others might be added. It is nevertheless true that Descartes has made use of artifice in order to profit by the discoveries of others, without wishing to

appear indebted to them. He treated some excellent men in an unjust and unworthy way when they offended him, and he had an unbridled ambition to set himself up as a party chief. But this does not diminish the beauty of his thoughts. Far from approving those who despise him and who repay merit with ingratitude, it is this that I blame principally in Descartes, and still more in several of his partisans, whose misunderstood attachment for a single author nourishes prejudice and hinders them from profiting by the light of so many others. I am accustomed to say that *the Cartesian philosophy is as it were the ante-chamber of the truth*, and that it is difficult to penetrate far beyond without having passed through this; but one deprives himself of the true knowledge of the heart of things if he stops there.

As for the little of reputation which I am honored by having accorded me, I have not acquired it in refuting Descartes; I have no need of that means; law, history and letters contributed to it before I had thought of mathematics. And if our new analysis, the calculus of which I have propounded, surpasses that of Descartes as much and more than his surpassed preceding methods, his remains none the less very worthy of esteem, although it has been necessary for the progress of science to disabuse those who think it suffices for everything; which cannot better be done than by proposing to them problems, beautiful and attractive, and, for those who know their method, even simple, but which not one of the Cartesian analysts has been able to solve.

* * * *

Let us come now to the heart of our dispute. I am not the first who has blamed Descartes for having rejected the search for final causes. Besides the Rev. Father Malebranche, the late Mr. Boyle did so with much zeal and solidity; not to speak of numerous other grave, moderate and well-disposed

authors, men who otherwise make much of Descartes. The reply is here made that he banished final causes from physics, and that he was right in so doing, but that he would have been wrong if he had banished them from ethics: *For the* '*whole good and the whole evil of our free actions depends upon their end.* This reply is surprising. The question is not concerning our free actions, but concerning God and his wisdom, which appears among the things which Descartes ought not to have neglected. And the reply, far from excusing him, would charge, if it were true, that according to him final causes belong only to our free actions. But I suppose that this is not the view of the author of the *Reflections*, nor that of Descartes. Nevertheless, his silence might be prejudicial to his intention. He did not wish to avail himself of this means of proving the existence of God; he may be excused on this point, although many have blamed him for it; but he has not done well in otherwise everywhere passing by so important a point, which ought to have been employed in some passages of his *Principles of Philosophy.* If God is the author of things and if he is sovereignly wise, one could not very well reason as to the structure of the universe without making considerations of his wisdom enter therein, just as one could not well reason concerning a building without entering into the designs of the architect. I have adduced elsewhere an excellent passage from the *Phaedo* of Plato (which is the dialogue on the death of Socrates), where the philosopher Anaximander, who had posited two principles, an intelligent mind and matter, is blamed for not having employed this intelligence or this wisdom in the progress of his work, having contented himself with the figures and motions of matter; and this is exactly the case with our too materialistic modern philosophers.

But, it is said, in physics we do not ask *why* things are but *how* they are. I reply that both questions are there asked. Often we can better judge of the means by the end. Besides to explain a machine we could not do better than

to state its design and to show how all its parts conduce thereto. This may even be useful in finding the origin of the intention. I wish that this method were employed also in medicine. The animal body is a machine, at once hydraulic, pneumatic and pyrobolic, the design of which is to maintain a certain motion; and by showing what conduces to this design and what is injurious to it, physiology as well as therapeutics, would be understood. Thus it is seen that final causes are of service in physics, not only to make us admire the wisdom of God, which is the principal reason, but also for knowing things and for managing them. I have elsewhere shown that whereas we may still dispute as to the efficient cause of light, which Descartes, as the most intelligent now acknowledge, has not sufficiently well explained, yet the final cause suffices for divining the laws which it follows, for provided we imagine that nature had as its design the conducting of rays from a given point to another given point by the easiest path, we find all these laws admirably, by simply employing, as I have done in the *Acta Eruditorum* of Leipsic, some lines of analysis — Molinenx thanked me for this in his *Dioptrics*, and he highly approved of the remark, which I made on the occasion, on the important use of final causes, which lead us to the consideration of Sovereign Wisdom, in showing us at the same time the laws of nature which are its consequence.

The author of the Reflections asks me to give the passage where Descartes says that matter receives successively all the forms of which it is capable. He has searched Articles 203 and 204 of the fourth part of his Principles for it. But it is found in Article 47 of the third part. I shall quote it in the words of the original Latin. The author remarks in the summary that the falsity of his suppositions regarding the origin of the world could not be injurious, and to prove it the better he adds: “Atque omnino parum refert quid hoc pacto supponatur, quia postea juxta leges naturae est mutandum. Et vix aliquid supponi potest, ex quo non idem effectua (quanquam fortasse

operosius), per easdem naturae leges deduci possit. Cum earum ope materia formas omnes, quarum est capax, successive assumat, si formas istas ordine consideremus, tandem ad illam quae est hujusmodi poterimus devenire." From this it may be judged whether I have imposed upon this author, and whether he does not say positively not only that matter can take, but also that it does take effectively as well as successively, all the forms of which it is susceptible, and that it is thus of little importance what suppositions are made. There is much to be said against this reasoning. In order to sustain it, it would be necessary to suppose that the same state of the universe returns always precisely after a certain period; since otherwise, a state of the world being taken which is posterior in fact to another, this latter state could never be deduced from the former, even if matter should; receive all the forms of which it is capable. But these periods involve other difficulties, so much so that thus all the infinite possibilities would have to occur in this finite, periodic interval; and all eternity could produce nothing new. To say, also, with Descartes, that he is at liberty to suppose almost anything he wishes, it would not suffice that each supposition or hypothesis should finally lead to our world; for it might be so distant and the passage from one to the other might be so long and so difficult that it would be impossible for the mind of man to follow it and to comprehend it. But the only proposition here in question is the one I have adduced, and the strange consequences of which I have noted: for if everything possible, and everything imaginable, however unworthy it be, some day comes to pass; if every fable or fiction has been or will become true history, there is naught but necessity, and no choice, no providence. And this consequence it is that the author of the Reflections does not disown, he having simply undertaken to disprove the proposition itself, which he did not find in the *Principles* of its author.

Nevertheless I am unwilling to attack the religion and piety of Descartes, as is unjustly imputed to me. I protested the contrary in express terms, for a

doctrine may he dangerous, without the one circulating it, or the one following it, remarking the fact or approving its consequences. Nevertheless it is well to make them known, to the end that we may be on our guard against them, forasmuch as it clearly appears that Spinoza and some others have drawn them. For there are minds disposed to seize upon the worst passages, and ingenious in deducing the most dangerous conclusions. I would not have spoken of Spinoza if I had thought that what I wrote would be published, from the fear that it would be believed that I wished to cast odium upon the Cartesians, knowing well that they have sometimes been wronged by mistaken zeal. Nevertheless, since there is a desire to criticize my words it has been necessary to show that I have advanced nothing groundlessly. As one of the best uses of true philosophy, and particularly of physics, is to nourish piety and to lead us to God, I am not ill-pleased with those who have given me this occasion for explaining myself in a way which may make good impressions on some one; although I could wish that it had been done without attributing to me a passion and partiality, from which, perhaps, few people are more removed than I. To express in few words the feeling which I have toward an author whose reputation I am wrongly accused of wishing to ruin (an enterprise which would be as unjust as it is impossible), I will say that he who does not acknowledge the eminent merit of Descartes is not very penetrating; but that he who acknowledges and esteems none but him and those who follow him, will never amount to much.

ON NATURE IN ITSELF; OR, ON THE FORCE RESIDING IN CREATED THINGS, AND THEIR ACTIONS. 1698.

[From the Latin.]

(1). I HAVE recently received from the very illustrious John Christopher Sturm, a man especially meritorious for his work in mathematics and physics, the Apology which he published at Altorf in defence of his Dissertation, De Idolo Naturae, which Gunther Christopher Schelhammer, the eminent and beloved physician of Kiel, attacked in his hook on nature. As I have formerly examined the same question, and as I have had by letters some discussions on this subject with the eminent author of the Dissertation, mention of which he made in a way very gratifying to me in recalling publicly some details of our correspondence in the first volume of his Select Physics (Vol. I, Sec. 1, Chap. 3, epilog. §v, pp. 119, 120), I have been thereby but the more disposed to give serious attention to such an important subject, judging it necessary that my view and the whole question should be a little more distinctly set forth from those principles which I have already often indicated. This apologetic dissertation seemed to me to offer an opportunity favorable to my design, because it was easy to see that the author had there treated in a few words the essential points of the question. For the rest I do not take sides between these illustrious men.

(2) —. Two points especially, it seems to me, are in question: first, in what consists the nature which we are accustomed to attribute to things, the commonly received attributes of which, according to the judgment of the celebrated Sturm, savor a little of paganism; next, whether there is in creatures any ενεργεια, a thing which he appears to deny. As for the first point, concerning nature in itself, if we examine what it is and what it is not,

I admit indeed that there is no soul of the universe; I even admit that these marvels, which happen every day and of which we are wont to say with reason that the work of nature is the work of an intelligence, are not to be attributed to certain created intelligences endowed with a wisdom and virtue proportioned to so great a matter; but that universal *nature* is, so to speak, the *handiwork of God,* and one so great that every natural machine (and this is the true but little observed difference between *nature* and *art*) is composed of really infinite organs, and consequently requires in the author and director infinite wisdom and power. This is why I hold the omniscient heat of Hippocrates and the soul-giving Cholco-goddess of Avicenna and the very wise plastic virtue of Scaliger and others and the hylarchic principle of Henry More, some of them impossible, others superfluous; and it is enough for me that the mechanism of things is constructed with' so much wisdom that all these marvels come to pass through its very development, organized beings being evolved, I think, according to a preconceived plan. I am therefore of the opinion of the illustrious author when he rejects the figment of a certain created nature, whose wisdom forms and governs the mechanisms of bodies-', but it does not hence follow, I believe, and reason does not admit, that all created, indwelling, active force must be rejected, (3.) We have just spoken of what it is not; let us now examine more closely what this nature is which Aristotle was not wrong in calling the *principle of motion and of rest,* although this philosopher seems to me to take the word in too broad a meaning, and understand by it not only local motion or rest in a place, but in general *change* and στασις or persistence. Whence, also, as I may say in passing, the definition which he gives of motion is truly obscure; it is, however, not so absurd as it seems to those who suppose that he meant to define only local motion. But let us return to the matter in hand. Robert Boyle, a man eminent and skilled in the accurate observation of nature, has written on nature in itself a little book,

the thought of which, if I remember correctly, is summed up in this, that we ought to regard nature as being the very *mechanism* of bodies; which indeed may be proved ως εν πλατει*;* but if he had examined the thing with more αχριβεια he would have distinguished in the mechanism itself the principles from their derivatives. So it does not suffice, in order to explain a clock, to say that it is moved in a mechanical manner, without distinguishing whether it receives this impulse from a weight or from a spring. I have already declared more than once (what I think will be of profit in hindering the abusing of mechanical explanations of material things, to the prejudice of piety, as if matter could exist of itself and as if the mechanism had no need of any intelligence or of any spiritual substance) that the origin of the mechanism itself does not come merely from a material principle alone nor from mathematical reasons but from a certain higher principle, and, so to speak, metaphysical source.

(4.) One remarkable proof, among others, of this truth is that the *foundation of the laws of nature* must be made to consist not in this, that the same quantity of motion is preserved, as was commonly believed, but rather in this, that the *same quantity of active power,* still more (and I have discovered that this happens for an admirable reason), the *same quantity of moving action must he preserved*, the estimation of which must be very different from that which the Cartesians conceive under quantity of motion.

I have conferred on this subject, partly by letters, in part publicly, with two mathematicians of superior talent, and one of them embraced my opinion altogether; the other, after long and thorough examination, ended by renouncing all his objections and avowing frankly that he had not yet been able to find an answer to my demonstration. And I am all the more astonished to see that the illustrious man, in the edited portion of his *Select Physics*, in explaining the laws of motion, has admitted the common doctrine as if it did not permit of doubt (he has, however, recognized that it

rests upon no demonstration but on a certain probability, and he has repeated it in this last dissertation, Chap. 3, § 2); but perhaps he wrote before my writings appeared and had not the time or the thought for revising his own, especially as he was persuaded that the laws of motion are arbitrary, which appears to me not at all according to reason. For I think that it is because of reasons determined by wisdom and order that God has been led to make the laws which we observe in nature; and hence it is evident, according to the remark which I formerly made on the occasion of an optical law and which the celebrated Molineux later highly approved in his *Dioptrics*, that final cause is not only useful to virtue and to piety in ethics and in natural theology, but that even in physics it serves to find and to discover hidden truths. So when the renowned Sturm, where he treats of final cause in *his Select Physics,* presented my doctrine among the hypotheses, I could have wished that he had sufficiently examined it in his criticism; for he would have found opportunity for saying in favor of the importance and richness of the argument many excellent things and such as are useful for piety.

(5.) But we must now examine what he says of the notion of nature in his apologetic dissertation, and what seems to us insufficient in it. He grants, Chap. IV, §§ 2, 3, and often elsewhere, that the movements which take place now are the result of the *eternal lam* once decreed by God, which law he calls soon after volition and *command;* and that there is no need of a new command from God, of a new volition, and still less of a new effort or of a sort of laborious operation (§ 3); and he repels as an unjust imputation on the part of his opponent the thought that God moves things as a wood-cutter does his two-edged axe, or as a miller governs his mill by retaining the waters or by turning them loose on the wheel. But in truth, as indeed it seems to me, this explanation does not suffice. For I ask if this volition or this command, or, if you prefer, this divine law, decreed originally,

attributed to things only an *extrinsic denomination;* or if, in forming them, it created in them some permanent impression, or as Schelhammer, remarkable as well for his judgment as for his experience, well calls it, an indwelling *lam* (although it is most often unknown to the creatures in whom it resides), whence proceed all actions and all passions. The first appears to be the doctrine of the authors of the system of Occasional Causes, and especially of the very ingenious Malebranche; the latter is received (and as I believe rightly) as the most true.

(6.) And in truth since this past order does not exist at present, it can produce nothing now unless it then left after it some perduring effect, which now still continues and operates. And he who thinks otherwise renounces, if I judge rightly, all distinct explanation of things; and it can be said that anything is, by an equal title, the result of anything, if that which is absent in space and time can without intermedium operate here and now. Thus, it is not sufficient to say that in creating things in the beginning God willed that they should observe a certain law in their progress, if his will is conceived to have been so inefficacious that things, were not affected by it and no lasting effect was produced in them. And assuredly it is contrary to the notion of the divine power and will, which is pure and absolute, that God should will and nevertheless in willing produce or change nothing; that he is always acting and never effecting; that in a word he *leaves no work.* Without doubt, if nothing was impressed on creatures by this divine word, "Let the earth bring forth, let the animals multiply if after it things were not affected otherwise than if no command intervened, it follows (since there must be between the cause and the effect a certain connection, either immediate or mediate), either that nothing takes place now conformably to this mandate or that this mandate effecting so much in the present must be always renewed in the future, a consequence which the learned author, with reason, repels. But if, on the contrary, the law decreed by God left some

trace of itself impressed on things; if things were so formed by the mandate as to render them fit to accomplish the will of the legislator, then it must be admitted that a certain efficacy, form or force, such as we are accustomed to call by the name of nature, is impressed on things, whence proceeds the series of phenomena according to the prescription of the first command.

(7.) But this indwelling force may, indeed be conceived distinctly but not explained by images; nor, certainly, ought it to be so explained any more than the nature of the soul, for force is one of those things which are not to be grasped by the imagination but by the understanding. Thus, when the author of the apologetic dissertation (Chap. 4, § 6) asks that the manner in which indwelling law operates in bodies ignorant of this law be explained to him by the imagination, I understand him to desire to have an explanation of it through the understanding; for otherwise, it might be believed that he demanded that sounds be painted and colors heard. Furthermore, if the difficulty of explaining things is sufficient for rejecting them, he therefore merits the imputation which he himself (Chap. 1, § 2) repels as unjust, of preferring to decide that everything is moved merely by a divine virtue rather than to admit, under the name of nature, something the nature of which is unknown to him. And certainly even Hobbes and others could claim with equal right that all things are corporeal, because they are persuaded that only bodies can be explained distinctly and by the imagination. But they themselves are justly refuted by the very fact that there is in things a power of acting which is not derived from imageable things, but merely to trace this to a mandate of God, which once given, in no wise affects things nor leaves any effect after it, so far from clearing up the difficulty, is rather to renounce the rôle of the philosopher and to cut the Gordian knot with the sword. For the rest, a more distinct and correct explanation of active force than has up to this time been given, may be

drawn from our *Dynamics,* in which we give an interpretation of the laws of nature and of motion, which is true and in accordance with things.

(8.) But if some defender of the new philosophy which introduces the inertia and torpor of things, goes so far as to take away from the commands of God all durable effect and all efficacy for the future, and has no scruples in requiring of God incessantly renewed efforts (that which Sturm prudently declares he is averse to), he himself may see how worthy he thinks this of God; moreover, he could not be excused unless he offered an explanation of why things themselves can last some time but the attributes of things which we understand under the name of nature cannot be lasting; why it may not be, furthermore, according to reason that just as the word fiat left something after it, namely, the persisting thing itself, so the not less admirable word of blessing has left also after it in things a certain fecundity or virtue of producing their acts and of operating, whence, if there is no obstacle, the operation results. That which I have explained elsewhere might be added to this if perchance it is not yet perfectly clear to all, that the very substance of things consists in their power of acting and suffering, whence it follows that not even durable things can be produced if a force of some duration cannot be imprinted upon them by the divine power. Thus it would follow that no created substance, no soul, would remain numerically the same; that nothing would be preserved by God, and consequently that all things would be only certain passing or evanescent modifications, and, so to speak, phantasms, of one permanent divine substance; and, what amounts to the same thing, that nature itself or the substance of all things, would be God; a pernicious doctrine, recently introduced into the world or renewed by a subtle but profane author. In truth, if corporeal things contained nothing but matter it would be quite true to say that they are in a flux and have nothing substantial, as the Platonists formerly very well recognized.

(9). Another question is whether we must say that creatures properly and truly act. This question is included in the first if we once understand that the indwelling nature does not differ from the power of acting and suffering. For there cannot be action without the power of acting, and on the other hand that potency is worthless which can never be exercised. Since, however, action and potency are none the less different things, the first successive, the second lasting, let us consider the action. Here, I confess, I find no little difficulty in explaining the thought of the learned Sturm. For he denies that created things act properly and of themselves, and, nevertheless, soon after, while admitting that they act, he does not wish that the comparison of creatures to an ax moved by a wood-cutter be attributed to him. I cannot draw from this anything certain nor do I find explained with sufficient clearness to what extent he recedes from the received opinions, or what distinct notion he has conceived in his mind of action, which, as the debates of the metaphysicians attest, is far from being obvious and simple. As for me, as far as I seem to have grasped the notion of action, the doctrine generally received in philosophy, that *actions belong to subjects,* follows from it and is established by it; and I think that this principle is so true that it may be inverted; so that not only is everything which acts a particular substance, but also every particular substance acts without cessation, not even excepting body itself, in which no absolute rest is ever found.

(10). But let us now examine a little more attentively the opinion of those who take away from created things true and individual action; a thing which Robert Fludd, author of the Philosophia Mosaica, formerly did, and also now some Cartesians do who think that it is not at all the things which act, but indeed God, on occasion of things and according to the aptitude of things; and thus things are occasions not causes; they receive, but do not effect or produce. After Cordemoi, de La Forge and other Cartesians had

proposed this doctrine, Malebranche, with his superior mind, lent it the lustre of his style; but no one, in my opinion, has presented solid proofs. Certainly if this doctrine is pushed to the point of suppressing even the immanent actions of substances (a view which the illustrious Sturm in his Select Physics, Bk. I, ch. iv, Epilo. §11, p. 176, rightly rejects, and in this he gives proof of much circumspection), then nothing in the world appears to be more contrary to reason. In truth, who will question that the mind thinks and wills, and that many thoughts and volitions in us are elicited from! ourselves, and that we are endowed with spontaneity? This would be not only to deny human liberty and to make God the cause of evil, but also to contradict the testimony of our inmost experience and of our conscience; through which we feel that those things are ours, which, without any kind of reason, our adversaries would transfer to God. But if we attribute to our soul the indwelling power of producing immanent actions, or, what is the same thing, of acting immanently, then nothing hinders, on the contrary, it is conformable to reason, that this same power should reside in other animated beings or forms, or, if you prefer, in the nature of substances; but if some one should think that in the nature of things as known to us only our souls are active, or that all power of acting immanently, and so to speak vitally, is joined with intellect, such assertions certainly rest on no ground, and can be defended only in opposition to the truth. As to what is to be believed concerning the transient actions of creatures, that will be explained better in another place, and has, in part, already been explained by us elsewhere: that is to say, the communication of substances or of monads has its source not in influx but in a concord proceeding from divine preformation; each substance, at the same time that it follows the indwelling power and laws of its own nature, being accommodated to the others; and it is in this that the union of the soul and body consists.

(11). Moreover, that bodies are of themselves inert is true if it is rightly understood, that is, that what is assumed to be in some way at rest cannot set itself in motion or allow itself without resistance to be set in motion by another body; any more than it can of itself change the rate of velocity or the direction which it once has, or allow it easily and without resistance to be changed by another body. And thus it must be confessed that extension, or what is geometrical in body if taken simply, has nothing in it which can give rise to action and to movement; on the contrary, matter rather resists motion by a certain natural inertia, as Kepler has well called it, so that it is not indifferent to motion and rest, as is generally thought, but it needs in order to move an active force proportionate to its size. Wherefore I make the very notion of materia prima, or of mass, consist in this very passive force of resistance (involving impenetrability and something more), which is always the same in body and proportioned to its size; and hence, I show that entirely different laws of motion follow than if there were in body and in matter itself only impenetrability together with extension; and that, as there is in matter a natural inertia opposed to motion, so in body itself, and what is more, in every substance, there is a natural constancy opposed to change. But this doctrine is not defended, but rather opposed, by those who deny action to things; for just as certain as it is that matter of itself does not begin motion, so certain is it (as very fine experiments on the motion communicated by a moving body show) that body retains of itself the impetus which it has once acquired, and that it is stable in its levity or makes an effort to persevere in that very series of changes which it has entered on. As these activities, or entelechies, cannot be modifications of primary matter or of mass, a thing essentially passive, as was recognized by the very judicious Sturm himself (as we shall see in the following paragraph), it may be inferred that there must be found in corporeal substance a first entelechy for activity; that is, a primitive motor force

which being joined to extension (or what is purely geometrical) and to mass (or what is purely material) always indeed acts but nevertheless, in consequence of the meeting of bodies, is variously modified through effort and impetus. And it is this same substantial principle which is called soul in living beings, and substantial form in others; and so far as by its union with matter it constitutes a substance truly one, or one per se, it forms what I call a monad: since if these true and real unities are taken away only beings by aggregation will remain; nay, rather, it follows from this, that there will be no real entities in bodies. For although there are atoms of substance given, that is, our monads without parts, there are no atoms of mass, i. e. of the smallest extension, or ultimate elements, since the continuous cannot be formed of points. In short, no being is given which is the greatest in mass or infinite in extension, although there may always be some larger than others: but a being is given which is the greatest by *intension* of perfections or infinite in power.

(12). I see however that in this same apolegetic dissertation, ch. IV, § 7 et seq. the celebrated Sturm has undertaken to attack by certain arguments the motor force residing in bodies. “I shall abundantly here prove,” he says, “that corporeal substance is not even capable of any *actively* motor potency.” But I do not understand what a power not actively motor can be. Moreover, he says that he will employ two arguments, one drawn from the nature of matter and of body, the other from the nature of motion. The first amounts to this, that matter, in its nature and essentially, is a passive substance; and that thus it is no more possible to give it active force than it is for God to will that a stone, as long as it remains a stone, shall be living and rational, that is, not a stone; further, whatever qualities are posited in bodies are but modifications of matter, moreover (what I acknowledge is well said), a modification of a thing essentially passive cannot render this thing active. But it is easy to reply with the received and true philosophy

that *matter* is to be understood as secondary or as primary; the secondary is a certain complete but not purely passive substance; the primary is purely passive but not complete, and consequently there must be added to it a soul, or form analogous to the soul, a primary entelexeia, that is, a certain effort or primitive power of acting, which is itself the indwelling law imprinted by divine decree. I do not think that such a view is repugnant to the illustrious and ingenious man who lately maintained that body is composed of matter and of spirit; provided that *spirit* is taken not for an intelligent thing (as in other cases is done) but for a soul or form analogous to the soul; not for a simple modification, but for something constituent, substantial and perduring, which I am accustomed to call *monad*, and which possesses a sort of perception and desire. Therefore this received doctrine, agreeing with the favorably explained dogma of the schoolmen, must be first refuted, in order that the argument of this illustrious man may have any weight. Whence also it is evident that we cannot admit, what he assumes, that whatever is in corporeal substance is but a modification of matter. For it is well known that according to received philosophy there are in the bodies of living beings souls which assuredly are not modifications. For although the illustrious man appears to maintain the contrary and to take away from the brutes all feeling, in the true meaning of the word, and soul, properly speaking, nevertheless, he cannot assume this opinion as the foundation of his demonstration until it itself has been proved. And I believe, on the contrary, that it is consistent neither with the order nor the beauty nor the reason of things, that this vital or immanently active principle should be only in a small part of matter, when greater perfection demands that it he in all. Nor does aught hinder souls, or at least forms analogous to souls, from being everywhere, although the dominant, and hence intelligent, souls, like the human, cannot be everywhere.

(13). The second argument, which the illustrious Sturm draws from the nature of motion, does not appear to me to be necessarily conclusive. He says that motion is only the successive existence of the thing in different places. Let us grant this provisionally, although we are not at all satisfied with it, and although it expresses rather the result of motion that its so-called formal reason; nevertheless motor force is not thus excluded. For a body is not only at the actual moment of its motion in the place assigned it, but it has also a tendency or effort to change its place so that the succeeding state follows of itself from the present by the force of nature; otherwise at the actual moment, and hence at any moment, body A, which is moved by body B, would in no wise differ from a body at rest; and from the opinion of the illustrious man, were it contrary to ours on this point, it would follow that there would be no difference whatever in bodies, because in the fullness of a mass in itself uniform no other difference can be assumed than that which respects the motion. Finally, it would further follow that there would be absolutely no variation in bodies, and that they would remain always in the same state. For if any portion of matter does not differ from another equal to and like it (which the illustrious Sturm must admit, since he does away with active forces, impulses, and all other qualities and modifications, except existence in this place, which would he successively another and another); if moreover the state at one instant does not differ from the state at another instant except by the transposition of portions of matter, equal and similar, and at every point fitting to each other, it evidently follows that, on account of the perpetual substitution of indiscernible things, it will be absolutely impossible to distinguish the states in the world of bodies at different moments. In truth, it would only he an extrinsic denomination by which one part of matter would be distinguished from another, that is, by the future, namely, that it would be later in another and still another place; but for the present state, there is no difference; and not even from the future

could a well founded difference he drawn, because we could even later never arrive at any true present difference, since by no mark can one place be distinguished from another place, nor (on the hypothesis of the perfect uniformity in matter itself) matter from other matter of the same place. In vain also would we after motion have resort to *figure.* In a mass perfectly similar, indistinguishable and full, there arises no figure, nor limit and distinction of various parts, except from the motion itself. If then motion does not contain any mark of distinction it will impart none to figure; and as everything which is substituted for that which was, is perfectly equivalent, no one, even were he omniscient, could grasp the least indication of change, and consequently everything will be just as if no change and no distinction occurred in bodies: and we could never in this way account for the diverse appearances which we perceive. And it would be as if we should imagine two perfect concentric spheres, perfectly similar in themselves and in all their parts, one of which should be enclosed in the other so that not the least aperture should be left: then, if we suppose that the inner sphere is either in motion or at rest, not even an angel, to say nothing more, will be able to perceive any difference between the states at different times, and will have no sign by which to distinguish whether the inner sphere is at rest or in motion and according to what law the motion is. Moreover, not even the boundary of the spheres can be defined, because of the want both of *aperture* and of difference; just as in this case motion cannot be noticed because of the one lack of *difference.* Whence it must be considered as certain (although those who have not sufficiently penetrated into these things have little noticed it) that such things are foreign to the nature and order of things, and that (what is among the number of my new and greater axioms) there is *nowhere any perfect similarity;* whence it follows also that we find in nature neither corpuscles of an extreme hardness, nor a fluid of an extreme tenuity, nor subtile matter universally diffused, nor ultimate

elements, called by some by the name of primary or secondary. It is, I believe, because he had understood something of this, that Aristotle, more profound in my opinion than many think, judged that in addition to local change there was need of alteration, and that matter would remain invariable. Moreover, this dissimilarity or diversity of qualities, and hence this *alloiosis* or alteration, which Aristotle did not sufficiently explain, comes from the diverse degrees and directions of efforts, and so from the modifications of indwelling monads. We can understand by this that there must necessarily he posited in bodies something besides a uniform mass and its not untimely transportation. Certainly, those who hold to atoms and a vacuum diversify matter at least in some degree by making it here divisible, there indivisible, full in one place, porous in another. But for a long time now I have understood (by laying aside the prejudices of youth) that atoms together with vacuum must be rejected. The celebrated author adds that the existence of matter through diverse moments is to be attributed to the divine will; why not then, he says, attribute to the same its existence here and now? I reply, that this, like all other things in so far as they involve some perfection, must undoubtedly be attributed to God; but just as this universal first cause which preserves all things does not destroy, but rather produces, the natural permanence, or once granted perseverance in existence, of the thing which begins to exist; so it will not destroy but rather strengthen the natural efficacy, or perseverance in action once communicated, of the thing set in motion.

(14) —. Many other things are met with in this apologetic dissertation which present difficulties, as what is said chapter IV, §11, concerning motion transmitted from one ball to another through several intermediaries, that the last ball is moved by the *same force* by which the first is moved, whereas, it seems to me, it is moved by an equivalent but not the same force; for (what may appear surprising), each ball repelled by the next

impinging it is set in motion by its *own force*, viz. its elasticity. (I do not here discuss at all the cause of this elasticity, nor do I deny that it ought to be explained mechanically by the movement of an indwelling and unstable fluid). So also it will rightly seem surprising when he says, § 12, that a thing which cannot set itself in motion cannot of itself continue the motion. For it is evident rather that, as there is need of force to communicate motion, so, when the impulse is once given, so far from there being need of a new force to continue it there is rather need of a new force to stop it. For the question here is not of that preservation of motion by means of a universal cause necessary to things, which, as we have remarked, could not destroy the efficiency of things without taking away their existence.

(15) —. By this it will be again perceived that the doctrine of occasional causes defended by some (unless it be explained in such a way as to admit of modifications which, the illustrious Sturm has in part admitted and in part seems disposed to admit), is subject to dangerous consequences which are certainly not agreeable to its very learned defenders. For so far is it from augmenting the glory of God by doing away with the *idola* of nature, that on the contrary, by resolving all created things into simple modifications of a single divine substance, it seems, with Spinoza, to make of God the very nature of things; since that which does not act, that which lacks active force, that which is deprived of distinctive mark, and finally, of all reason and ground of permanence, can in no wise be a substance. I am thoroughly persuaded that the illustrious Sturm, a man remarkable for his piety and learning, is very far removed from these monstrosities. Thus there is no doubt but that he will either have to show clearly that there remains in things some substance or even some variation, without prejudice to his doctrine, or he will have to accept the truth.

(16). I have many reasons to suspect that I have not sufficiently grasped his meaning, nor he mine. He has somewhere admitted to me that a certain

portion of divine power (that is, as I think, an expression, imitation, nearest effect; for the divine force itself can certainly not be divided into parts) can and even in a way must be regarded as possessed by and attributed to things. What he has transmitted to me and what he has repeated in his Select Physics, may be seen in the passage which I quoted at the beginning of this essay. If this be interpreted (as the terms seem to imply) in the sense in which we speak of the soul as a portion of the divine breath, then there is no longer any controversy between us. But what prevents me from affirming that such is his meaning, is that nowhere else do I see him propounding anything like it, nor advancing any deductions from it. I notice on the contrary, that his general views are little in harmony with this opinion, and that his apologetic dissertation goes into everything else. When indeed my views concerning indwelling force were first published in the month of March, 1694, in the Acta Eruditorum of Leipzig (views which my Essay on Dynamics published in the same in April, 1695, farther developed), he addressed to me by letter certain objection's; but after having received my reply, he decided in a very friendly way that the only difference between us was in the manner of expressing ourselves. When I, remarking this, had brought some other things to his attention, he turning about declared there were many differences between us, which I recognized: and finally, these having been removed, he wrote me anew that there was no difference between us except in terms, a thing very agreeable to me. I have, therefore, wished, on the occasion of the recent apologetic dissertation, to so explain the matter that finally the opinion of each one of us and the truth of the same may the more easily be established. For the illustrious author possesses, moreover, such rare penetration and clearness of exposition, that I hope that no little light will be thrown by his zeal on this great subject. And consequently this work of mine will not be useless because it furnishes him the opportunity, with his wonted talent and force of

judgment, to examine and to explain some things of importance in the present subject, which have up to this time been omitted by authors and by me. But these things will be supplemented, if I am not mistaken, by new, more profound, and more comprehensive principles, whence perhaps may come, some day, a reconstructed and amended system of philosophy midway between the formal and the material (and properly uniting and preserving both).

ETHICAL DEFINITIONS. 1697-1698.

[From the French.]

AS TO CHARITY or disinterested 'love, on which I see embarrassing disputes have arisen, I think that one could not extricate one's self better than by giving a true definition of love. I believe that in the preface to the work [*Codex Diplomaticus Juris Gentium]* which is known to you, sir, I have formerly so done in noting the source of justice. For JUSTICE is fundamentally nothing else than charity conformed to wisdom. CHARITY is universal benevolence. BENEVOLENCE is a disposition or inclination to love and it has the same relation to love that habit has to act. And LOVE is this act or active state of the soul which makes us find our pleasure in the happiness or satisfaction of others. This definition, as I have since noted, is capable of solving the enigma of disinterested love, and of distinguishing it from the bonds of interest or debauchery. I remember that in a conversation, which I had several years ago with the Count — and other friends, in which human love alone was spoken of, this difficulty was agitated, and my solution was found satisfactory. When one loves a person sincerely one does not seek one's own advantage or a pleasure severed from that of the beloved person, but one seeks one's pleasure in the contentment and in the felicity of this person. And if this felicity did not please in itself, but merely because of an advantage resulting therefrom to us, this would no longer be pure and sincere love. It must be then that pleasure is immediately, found in this felicity, and that grief is found in the unhappiness of the beloved person. For whatever produces pleasure immediately through itself is also desired for itself, as constituting (at least in part) the end of our wishes, and as something which enters into our own felicity and gives us satisfaction.

This serves to reconcile two truths which appear incompatible; for we do all for our own good, and it is impossible for us to have other feelings whatever we may say. Nevertheless we do not yet love altogether purely, when we seek the good of the beloved object not for itself and because it itself pleases us, but because of an advantage which we foresee from it. But it is apparent from the notion of love which we have just given that we seek at the same time our good for ourselves and the good of the beloved object for it itself, when the good of this object is immediately, finally *(ultimato)* and through itself our end, our pleasure and our good; as happens in regard to all the things wished for because they are pleasing in themselves, and are consequently good of themselves, even if one should have no regard to consequences; these are ends and not means.

Now divine love is infinitely above the loves of creatures, for other objects worthy of being loved constitute in fact part of our contentment or our happiness, in so far as their perfection touches us, while on the other hand the felicity of God does not compose a part of our happiness, but the whole. He is its source and not its accessory, and since the pleasures of lovable earthly objects can injure by their consequences, only the pleasure taken in the enjoyment of the divine perfections is surely and absolutely good, without danger or excess being possible.

These considerations show in what the true disinterestedness of pure love consists which cannot be severed from our own contentment and felicity, as M. de la Trappe has well remarked, because our true felicity embraces essentially the knowledge of the felicity of God and of the divine perfections, that is to say, the love of God. And consequently it is impossible to prefer one to the other by a thought founded in distinct notions. And to wish to sever one’s self from one’s self and from one’s own good is to play with words, or if you wish to go to the effects, it is to fall into an extravagant quietism, it is to desire a stupid, or rather affected and

simulated inaction in which under pretext of resignation and of the annihilation of the soul swallowed up in God, one may go to libertinism in practice, or at least to a hidden speculative atheism, such as that of Averroes and of others more ancient who taught that our soul finally lost itself in the universal spirit, and that this is perfect union with God. *Extract from a letter to Nicaise, 1697.*

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The error concerning pure love appears to be a misunderstanding, which as I have already said to you, sir, comes perhaps from not paying sufficient attention to forming definitions of terms.

To LOVE truly and disinterestedly is nothing else than to be led to find pleasure in the perfections or in the felicity of the object, and consequently to experience grief in what may be contrary to these perfections. This love has properly for its object substances susceptible of felicity; but some resemblance of this is found as regards objects which have perfections without being aware of it, as for example, a beautiful picture. He who finds pleasure in contemplating it and would find pain in seeing it ruined even if it should belong to another, would love it, so to speak, with a disinterested love. This could not be said of another who should merely have in view gain in selling it or the winning of applause by showing it, without for the rest caring whether or not it were ruined when it should no longer belong to him. This shows that pleasure and action cannot be taken away from love without destroying it, and that M. des Preaux in the beautiful verses which you sent me, was right both in recommending the importance of the divine love and in opposing a love which is chimerical and without effect. I have explained my definition in the preface of my Codex Diplomaticus Juris Gentium (published before these new disputes arose), because I had need of it in order to give the definition of JUSTICE, which in my opinion is

nothing but charity regulated according to wisdom. Now CHARITY being a universal benevolence, and BENEVOLENCE being a habit of loving, it was necessary to define what it is to love. And since to LOVE is to have a feeling which makes us find pleasure in what conduces to the happiness Of the beloved object, and since wisdom (which makes the rule of justice) is nothing but the science of happiness, I showed by this analysis that happiness is the basis of justice, and that those who would give the true elements of jurisprudence, which I do not find laid down as they should be, ought to begin by establishing the science of happiness, which does not yet appear well determined, although books on Ethics are full of discourses on blessedness or the sovereign good.

As PLEASURE, which is nothing but the feeling of rare perfection, is one of the principal points of HAPPINESS, which in turn consists in a lasting condition of possession of what is necessary in order to taste pleasure, it were to be desired that the science of pleasures which the late M. Lautin meditated had been completed. — *Extract from a letter to Nicaisse, 1698.*

[The following Ethical Definitions, translated from the Latin, are undated.]

Justice is the charity of the wise.

Charity is general benevolence.

Benevolence is the habit of love.

To love anyone is to delight in his happiness.

Wisdom is the science of happiness.

Happiness is durable joy.

Joy is a state of pleasure.

Pleasure or delight is a sense of perfection, that is, a sense of something which helps or which sustains any power.

He is perfected whose power is augmented or helped.

Demonstrate this Hypothesis elsewhere:

The world is governed by the wisest and most powerful of monarchs, whom we call God.

Propositions.

The end or aim of God is his own joy or love of himself.

God created creatures, and especially those endowed with mind, for his own glory or from love of himself.

God created all things in accordance with the greatest harmony or beauty possible.

God loves all.

God bestows on all as much as is possible.

Neither hatred, nor wrath, nor sadness, nor envy, belong to God.

God loves to be loved or those loving him.

God loves souls in proportion to the perfection which he has given to each of them.

The perfection of the universe, or harmony of things, does not allow all minds to be equally perfect.

The question why God has given to this mind more perfection than to another, is among senseless questions, as if you should ask whether the foot is too large or the shoe pinching the foot is too small. And this is a mystery, ignorance of which has obscured the whole doctrine of the predestination and justice of God.

He who does not obey God is not the friend of God.

He who obeys God from fear is not yet the friend of God.

He who loves God above all things is at length the friend of God.

He who does not seek the common good does not obey God.

He who does not seek the glory of God does not obey God.

He who at the same time seeks the glory of God and the common good obeys God.

He who does not in his acts recognize God does not sufficiently love God.

He who is displeased by some things in the acts of God does not think God perfect.

He who thinks God does some things from absolute good pleasure, having no reason, or from irrational or indifferent liberty, does not think God perfect. -

He who thinks God acts in the best possible way acknowledges that God is perfect.

Whoever does not delight in the contemplation of the divine perfection does not love God.

All creatures serve the felicity or glory of God in the degree of their perfection.

Whoever against his will serves the felicity of God does not love God.

Whoever places his own felicity in relation with the divine felicity, loves himself and loves finally God.

He who loves God endeavors to learn his will.

He who loves God obeys God's will.

He who loves God loves all.

Every wise man endeavors to do good to all.

Every wise man does good to many.

Every wise man is a friend of God.

The wiser one is the happier he is.

Every wise man is just.

Every just man is happy

ON THE CARTESIAN DEMONSTRATION OF THE EXISTENCE OF GOD. 1700-1.

[From the French.]

IN TRUTH METAPHYSICS is natural theology, and the same God who is the source of all good is also the principle of all knowledge. This is because the idea of God embraces that of absolute being, that is to say, what is simple in our thoughts, from which all that we think takes its origin. Descartes had not considered the matter from this side; he gives two ways of proving the existence of God: the *first* is, that there is in us an idea of God, since we undoubtedly think of God and since we cannot think of anything without having the idea of it. Now if we have an idea of God and if it is a true one, that is, if it is of an infinite being and if it represents it faithfully, it cannot he caused by anything less, and consequently God himself must be its cause. He must therefore exist. The *other* argument is still shorter. It is that God is a being which possesses all perfections and consequently possesses *existence* which is in the number of perfections; hence he exists. It must be confessed that these arguments are a little suspicious because they advance too quickly and do violence to us without enlightening us; whereas true demonstrations are wont to fill the mind with some solid nourishment. However it is difficult to find the knot of the matter, and I see that a number of able men who have made objection to Descartes have passed this by.

Some have believed that there is no idea of God because he is not subject to the imagination, supposing that *idea* and *image* are the same thing. I am not of their opinion, and I well know that there is an idea of *thought* and of *existence* and of similar things of which there is no image. For we think of

something and when we remark what made us recognize it, this, so far as it is in our soul, is the idea of the thing. This is why there is also an idea of what is not material or imaginable.

Others admit that there is an idea of God, and that this idea embraces all perfections, but they cannot understand how existence follows from it: be it because they do not admit that existence is of the number of perfections, or because they do not see how a simple idea or thought can imply existence outside of us. For myself I well believe that he who has acknowledged this idea of God and who fully sees that existence is a perfection, ought to avow that this perfection belongs to God. In fact I do not doubt the idea of God any more than his existence, on the contrary, I claim that I have a demonstration of it; but I would not that we flatter ourselves and persuade ourselves that we could succeed in so great a matter at so little cost. Paralogisms are dangerous in this matter; when they are not successful they rebound upon ourselves and strengthen the opposite party. I say then that we must prove with all imaginable accuracy that there is an idea of an all-perfect being, that is to say of God. It is true that the objections of those who think that they can prove the contrary because there is no image of God are as I have just shown worthless; but it must also be confessed that the proof which Descartes offers for establishing the idea of God is imperfect. How, he will say, can we speak of God without thinking of him. And could we think of God without having the idea of him? Yes, undoubtedly, we sometimes think of impossible things, and this has even been demonstrated; for example, Descartes held that the quadrature of the circle is impossible, and yet we do not cease to think of it and to draw consequences as to what would happen if it were possible. Motion *of ultimate swiftness* is impossible in any body whatever, for if it were supposed in a circle, for example, another concentric circle, surrounding the first and attached firmly to it, would be moved with a velocity still greater than the first, which

consequently is not of the ultimate degree, contrary to what we have supposed. All this to the contrary notwithstanding, we think of this ultimate swiftness which has no idea since it is impossible. So the *greatest of all circles* is an impossible thing, and a number made up of *all possible units* is no less so: there is proof of it. And nevertheless we think of all this. This is why there is certainly room to doubt whether the idea of the *greatest of all stars* is to be trusted and whether it does not involve some contradiction; for I well understand, for example, the nature of motion and of swiftness, and what greatest is. But for all that I do not understand whether all this is compatible and whether there is a way of joining all this and making therefrom an idea of the greatest swiftness of which motion is capable. So although I know what star is, and what largest and most perfect are, nevertheless, I do not yet know whether there is not a hidden contradiction in joining all these together, as there is in fact in the other examples mentioned. That is to say, in a word, I do not know for all this whether such a star is possible; for if it were not there would be no idea of it. However, I confess, that God in this respect has a great advantage over all other things. For it is sufficient to prove that he *is possible* to prove that he exists, a thing not encountered anywhere else that I know of. Furthermore I infer from this that there is a presumption that God exists for there is always a presumption on the side of possibility; that is to say everything is held to be possible until its impossibility is proved. There is therefore also a presumption that God is possible, that is, that he exists, since in him existence is a consequence of the possibility. This may suffice for practical life but it is not sufficient for a demonstration. I have disputed much on this point with several Cartesians, but, finally, I have gotten some of the more able to frankly confess, after having understood the force of my arguments, that this possibility was still to be demonstrated. There are even some who after being challenged by me have undertaken to demonstrate this but they have

not yet completed it. — *Extract from an undated letter to* (*probably*) *the Grand Duchess Sophia.*

I have not yet seen the work published at Basle in the year 1699, entitled *Judicium de argumento Cartesii pro existentia Dei petito ab ejus idea*; but having formerly casually examined the same argument in an essay *On Knowledge*, *Truth and Ideas*, inserted in the *Acta* of Leipzig, in the year 1684, I am curious to read what an able man says in the *Histoire des Ouvorages des Savons,* May, 1700, in favor of the arguments of Descartes and against the Latin work published at Basle. And I will say to you, sir, that I hold a position midway between the work and the reply. The author of the work believes that the argument is a sophism, the author of the reply considers it a demonstration, and I myself believe that it is an imperfect argument which tacitly takes for granted a proposition the proof of which, if added, would complete the demonstration. Thus the argument is not to be despised; it is at least a good beginning. *Est aliquid prodire tenus*, *si non datur ultra.*

Geometricians, who are the true masters of the art of reasoning, have seen that in order that demonstrations drawn from definitions may be good, it is necessary to prove, or at least postulate, that the notion embraced in the definition is possible. This is why Euclid placed among his postulata, that the circle is something possible, in asking that a circle, the center and radius of which are given, be described. The same precaution holds good in every sort of reasoning, and particularly in the argument of Anselm, archbishop of Canterbury (in Liber contra insipientem), quoted and examined by St. Thomas and other scholastics, and renewed by Descartes, which proves that God, being the greatest or most perfect being, embraces that perfection called existence, and that consequently he exists. To this it may be said that the reasoning is sound, supposing that the being sovereignly perfect or which embraces all perfections, is possible; and that it is the privilege of the

divine nature (ms a se) that its essence comprises existence, that is, that it exists provided it is possible. And even omitting all mention of perfection it may be said that if necessary being is possible it exists. This is undoubtedly the most beautiful and the most important of modal propositions, because it furnishes a passage from power to act, and it is solely here that *posse ad esse valet conseguentia.* Also herein is found the principle of existences.

The author of the work opposes an example to Descartes, in reasoning as he does and reaching a false conclusion, for he says that existence is contained in the idea of a very perfect body (or one which comprises all perfection), hence such a body exists. To this, in my opinion, reply must he made that the idea of a very perfect being in this sense is impossible, for a body being limited by its essence cannot include all perfections. The work and the reply give themselves up a little too much to the terms and distinctions of real (or formal) and objective, essence and existence, whither I do not think it necessary to follow them. It is sufficient to remark that the author of the work having proposed to himself the reasoning of those who say *that God must necessarily exist because it is not impossible that God be,* has touched the essential point and has replied by no means badly that it does not follow that a thing is possible because we do' not see its impossibility, our knowledge being limited. But this might have led him to think that the argument is not a sophism and that those who have proposed it have sinned only in concealing what they presuppose, instead of following the example of the geometricians, who have penetration and sincerity enough to see and expressly indicate the axioms and postulates of which they have need and which they presuppose.

The author of the reply, as far as I can understand him, does not enter sufficiently into this; he has good reason, p. 211, for rejecting this limitation: *that wholly perfect being includes existence if it be supposed that there is a wholly perfect being*, that is to say an actual. But if we understand

it thus: *if it be supposed that there is a wholly perfect being possible or among essences,* the limitation is good. He is right in saying that it is not permissible to doubt things which are known to us under the pretext that our knowledge is limited. But this does not appear to be the meaning of the author of the work. I have already remarked in my essay, before mentioned, that the true mark of perfectly distinct knowledge is that the possibility of the notion in question can be proved *a priori.* Thus he is fundamentally wrong here in attributing to himself a clear and distinct notion when he cannot verify it by the mark which is essential to it. The example of the proposition *that two and two are four* is not applicable here because it can be demonstrated by definitions the possibility of which is recognized. — *Extract from a letter to ——,* 1700.

I have already elsewhere given my opinion concerning St. Anselm's demonstration of the existence of God, renewed by Descartes; the substance of which is that that which embraces in its idea all perfections, or the greatest of all possible beings, comprehends also in its essence existence, since existence is in the number of perfections, and otherwise something could be added to that which is perfect. I hold a medium between those who take this reasoning for a sophism and the opinion of Reverend Father Lami, explained here, who considers it a complete demonstration. I admit then that it is a demonstration, but imperfect, which demands or supposes a truth which deserves to be further demonstrated. For it, is tacitly supposed that GOD, or the PERFECT BEING, is possible. If this point were again demonstrated, as it should be, it could be said that the existence of God was demonstrated geometrically *a priori.* And this shows what I have already said, that we cannot reason perfectly on ideas except by knowing their possibility to which geometricians have paid attention, but the Cartesians not sufficiently. However it can be said that this demonstration is none the less of importance, and so to speak, presumptive. For every being must be

held possible until its impossibility is proved. I doubt however whether Reverend Father Lami was right in saying that it was adopted by the School. For the author of the marginal note remarks here very justly that St. Thomas had rejected it.

However this may be, a demonstration still more simple might be formed, not mentioning the perfections at all, so as not to be stopped by those who should venture to deny that all perfections are compatible, and consequently that the idea in question is possible. For by simply saying that God is a being of itself or primative, *ens a se,* that is, which exists by its essence it is easy to conclude from this definition that such a being, if it is possible, exists; or rather, this conclusion is a corollary which is derived immediately from the definition, and hardly differs from it. For the essence of the thing being only that which makes its possibility in particular, it is very clear that to exist by its essence, is to exist by its possibility. And if the *being of itself* were defined in terms still nearer, by saying that it is the *being which must exist because it is possible,* it is manifest that all which could be said against the existence of such a being, would be to deny its possibility.

On this subject we might again make a modal proposition, which would be one of the best fruits of all logic: namely, that if necessary being is possible, it exists. For necessary being and being by its essence are only one and the same thing. Thus the reasoning taken with this bias appears to have solidity; and those who will have it that from mere notions, ideas, definitions or possible essences, actual existence can never be inferred, in truth fall into what I have just said, namely, they deny the possibility of being of itself. But it is well to notice that this bias itself serves to show that they are wrong, and fills up finally the gap in the demonstration. For if being of itself is impossible, all beings by others are so also; since they exist ultimately only through being of itself; thus nothing could exist. This

reasoning leads us to another important modal proposition, equal to the preceding, and which joined with it, completes the demonstration. It might be expressed thus: If necessary being is not, there is no being possible. It seems that this demonstration has not been carried so far up to this time. However I have also labored elsewhere to prove that the perfect being is possible.

I designed, sir, merely to write you in few words some trifling reflections on the memoirs which you sent me; but the variety of matters, the heat of meditation and the pleasure which I have taken in the generous design of the Prince who is the protector of this work, have earned me on. Pardon me for having been so lengthy, and I am, etc. — *Extract from a letter to the editor of the Journal de Trevoux.* 1701.

CONSIDERATIONS ON THE DOCTRINE OF A UNIVERSAL SPIRIT. 1702.

MANY INGENIOUS PERSONS have believed, and believe now, that there is but one spirit, which is universal and which animates all the universe and all its parts, each one in accordance with its structure and organs, just as the same breath of wind makes the various pipes of an organ give forth different sounds. And that thus when an animal has its organs well placed, it produces there the effect of an individual soul, but when the organs are spoiled, this individual soul again becomes nothingness, or returns, so to speak, into the ocean of the universal spirit.

Aristotle has seemed to many to hold a like opinion, which Averroes, a celebrated Arabian philosopher, has renewed. He believed that there was in us an *intellectus agens* or active understanding, and also an *intellectus patiens* or passive understanding: that the former, coming from without, was eternal and universal for all, but that the passive understanding was peculiar to each, and took its departure at the death of man. In the last two or three centuries, this has been the doctrine of some Peripatetics, as of Pomponatius, Contarenus and others; and traces of it are to be recognized in the late M. Naudé, as his letters and the Naudæana, which have been lately published, show. They taught this in secret to their most intimate and best qualified disciples, while in public they had the cleverness to say that this doctrine was in reality true according to philosophy, by which they understood that of Aristotle *par excellence*. but that it was false according to faith. Hence have finally arisen the disputes over double truth which the last Lateran Council condemned.

I have been told that Queen Christina had a decided leaning toward this opinion, and as M. Naudé, who was her librarian, was imbued with it, he probably communicated to her what he knew of the secret views of the celebrated philosophers with whom he had had intercourse in Italy. Spinoza, who admits only one substance, is not far removed from the doctrine of a single, universal spirit, and even the New Cartesians, who claim that God alone acts, establish it likewise without noticing it. Apparently Molinos and several other New Quietists, among others, a certain Joannes Angelus Silesius, who wrote before Molinos and some of whose works have recently been reprinted, and even Weigelius before them, embraced this opinion of the sabbath or rest of souls in God. This is why they believed that the cessation of particular functions was the highest state of perfection.

It is true that the Peripatetic philosophers did not make this spirit quite universal, for besides the intelligences, which according to them, animated the stars, they had an intelligence for this world here below; and this intelligence performed the part of the active understanding in the souls of men. They were led to this doctrine of an immortal soul common to all men, by false reasoning. For they took for granted that actual infinite multiplicity is impossible and that thus it was not possible that there should be an infinite number of souls, but that there *must* be nevertheless, if individual souls existed. For the world being, according to them, eternal, and the human race also, and new souls always being born, if these all continued to exist, there would now be an actual infinity. This reasoning passed among them for a proof. But it was full of false suppositions. For neither the impossibility of actual infinitude, nor that the human race has existed eternally, nor the generation of new souls, would be admitted, since the Platonists teach the preëxistence of souls, and the Pythagoreans teach metempsychosis, and claim that a certain determined number of souls remains ever and undergoes changes.

The doctrine of a universal spirit is good in itself, for all those who teach it admit in effect the existence of the divinity, whether they believe that this universal spirit is supreme — for in this case they hold that it is God himself —, or whether they believe with the Cabalists that God created it. This latter was also the opinion of Henry More, an Englishman, and of certain other modern philosophers, and especially of certain chemists who believed in a universal Arcbæus or world-spirit; and some have maintained that it was this spirit of the Lord which, as the beginning of *Genesis* says, "moved upon the waters."

But when they go so far as to say that this universal spirit is the only spirit and that there are no souls or individual spirits, or at least that these individual souls cease to exist, I believe that they pass the limits of reason, and advance, without grounds, a doctrine of which they have not even a distinct notion. Let us examine a little the apparent reasons upon which they rest this doctrine which destroys the immortality of souls and degrades the human race, or rather, all living creatures, from that rank which belongs to them and which has commonly been attributed to them. For it seems to me that an opinion of so much importance ought to be proved, and that it is not sufficient to have imagined a supposition of this kind, which really is only founded on a very shocking comparison with the wind which animates musical organs.

I have showed above that the pretended demonstration of the Peripatetics who maintained that there was but one spirit, common to all men, is of no force, and rests only on false suppositions. Spinoza has pretended to prove that there is only one substance in the World, but these proofs are contemptible or unintelligible. And the New Cartesians, who believed that God alone is active, gave no proof of it; not to mention that Father Malebranche seemed to admit at least the internal action of individual spirits. One of the most apparent reasons which have been urged against

individual souls, is the embarrassment as to their origin. The scholastic philosophers have disputed greatly over the origin of forms, among which they include souls. Opinions differed greatly as to whether there was an eduction of power from matter, as a statue is extracted from marble; or whether there was a traduction of souls so that a new soul should be born of a preceding soul as one fire is lighted from another; or whether souls already existed and only made themselves known after the generation of the animal; or finally whether souls were created by God every time there was a new generation.

Those who denied individual souls, believed that they were thereby freeing themselves from all difficulties, but this is cutting the knot instead of untying it, and there is no force in an argument which would run thus: *the explanations of a doctrine have been various, hence the whole doctrine is false.* This is the manner in which sceptics reason and if it were to be accepted, there would be nothing which could not be rejected. The experiments of our time lead us to believe that souls and even animals have always existed, although in small volume, and that generation is only a kind of growth; and in this way all the difficulties concerning the generation of souls and of forms, disappear. However we do not refuse God the right to create new souls or to give a higher degree of perfection to those which are already in nature, but we speak of what is ordinary in nature without entering into the particular economy of God in respect to human souls, which may have privileges since they are infinitely above those of animals.

In my opinion what has greatly contributed to incline ingenious persons toward the doctrine of a single universal spirit, is the fact that common philosophers gave currency to a theory, treating of separate souls and the functions of the soul independent of the body and of the organs, which they could not sufficiently justify; they had good reason for wishing to maintain the immortality of the soul as in accordance with divine perfections and true

morality, but seeing that, in death, the organs visible in animals became disordered and finally spoiled, they believed themselves obliged to have recourse to separate souls, that is to say, to believe that the soul existed without any body, and did not even then cease to have its thoughts and activities. And in order to better prove this they tried to show that the soul, even in this life, has abstract thoughts, independent of material ideas. Now those who rejected this separate state and this independence, as contrary to experience and reason, were all the more compelled to believe in the extinction of the particular soul and the preservation of the single, universal spirit.

I have examined this matter carefully and I have proved that really there are in the soul some materials of thought or objects of the understanding which the external senses do not furnish, namely, the soul itself and its activities *(nihil est in intellectu quod non fuerit in sensu, nisi ipse intellectus)*; and those who believe in a universal spirit will readily grant this, since they distinguish it from matter. I find, nevertheless, that there is never an abstract thought which is not accompanied by some images or material traces, and I have established a perfect parallelism between what takes place in the soul and what takes place in matter, having, shown that the soul with its activities is something distinct from matter, but that nevertheless it is always accompanied by organs which must correspond to it; and that this is reciprocal and always will be.

And as to the complete separation between soul and body, although I can say nothing beyond what is said in the Holy Scriptures of the laws of grace and of what God has ordained in respect to human souls in particular — since these are things which cannot he known through the reason and which depend upon revelation and upon God himself, nevertheless, I see no reason either in religion or in philosophy, which obliges me to give up the doctrine of the parallelism of the soul and the body, and to admit a perfect

separation. For why might not the soul always retain a subtile body, organized in its fashion, and even resume some day, in the resurrection, as much as is necessary of its visible body, since we accord to the blessed a glorious body and since the ancient Fathers accorded a subtile body to the angels?

Moreover this doctrine is conformable to the order of nature, established through experience; for the observations of very skillful observers make us believe that animals do not begin when the ordinary person thinks they do, and that the seminal animals, or animated seeds, have existed ever since the beginning of things. Order and reason demand also that what has existed since the beginning should not end; and thus as generation is only the growth of a transformed and developed animal, so death will only he the diminution of a transformed and developed animal, while the animal itself will always remain, during the transformations, as the silkworm and the butterfly are the same animal. And it is well to remark here that nature has the skill and the goodness to reveal its secrets to us in a few little samples, to make us judge of the rest, since everything is correspondent and harmonious. It shows this also in the transformation of caterpillars and of some insects — for flies also come from worms — to make us divine that there are transformations everywhere. Experiments with insects have destroyed the common belief that these animals are engendered through nourishment, without propagation. It is thus also that nature has shown us in the birds a specimen of the generation of all animals by means of eggs, a fact which new discoveries have now established. Experiments also with the microscope have shown that the butterfly is only a development of the caterpillar; but, above all, that the seeds contain the plant or animal already formed, although afterward it needs transformation and nutrition or growth in order to become an animal perceptible to our ordinary senses. And as the smallest insects are also engendered by the propagation of the species, we

must judge the same to be true of these little seminal animals, namely, that they themselves come from other seminal animals, even smaller, and so began to exist when the world did. This is in harmony with the Sacred Scriptures, which imply that seeds existed first of all.

Nature has given us an example in sleep and swoons, which ought to make us believe that death is not a cessation of all the functions, but only a suspension of certain of the more noticeable functions. And I have explained elsewhere an important point, which not having been sufficiently considered has the more easily inclined men to the opinion of the mortality of souls: namely, that a large number of minute perceptions, equal and interbalanced, having no background and no distinguishing marks, are not noticed and cannot he remembered. But to wish to conclude from this that the soul is then altogether without functions is the same thing as when the common people believe that there is a vacuum or nothing where there is no visible matter, and that the earth is without motion, because its motion is not noticeable, being uniform and without shocks. We have innumerable minute perceptions which we cannot distinguish; a great deafening noise, as, for example, the murmur of a whole assembled people, is composed of all the little murmurs of particular persons which we would not notice separately, but of which we have nevertheless a sensation, otherwise we would not be sensible of the whole. So when an animal is deprived of the organs capable of giving it sufficiently distinct perceptions, it does not at all follow that there do not remain to it smaller and more uniform perceptions, nor that it is deprived of all organs and all perceptions. The organs are only folded up and reduced to small volume, but the order of nature demands that everything redevelop, and, some day, return to a visible state, and that there be in these changes a certain well-regulated progress, which serves to make things ripen and become perfect. It appears that Democritus himself saw this resuscitation of animals, for Plotinus says that he taught a resurrection.

All these considerations show how not only individual souls, but also animals, exist, and that there is no reason to believe in an utter extinction of souls nor a complete destruction of the animal, and consequently that there is no need to have recourse to a single universal spirit and to deprive nature of its particular and existing perfections — which would be in reality also not to sufficiently consider its order and harmony. There are besides many things in the doctrine of a single, universal spirit which cannot be maintained and involve difficulties much greater than those of the common doctrine.

Here are some of them: you see, in the first place, that the comparison with the wind which makes various pipes sound differently, flatters the imagination, but explains nothing, or rather implies exactly the contrary. For this universal breath of the pipes is only a collection of a quantity of separate breaths; moreover each pipe is filled with its own air which can even pass from one pipe to another, so that this comparison would establish rather individual souls, and would even favor the transmigration of souls from one body to another, as the air can change pipes.

And if we imagine that the universal spirit is like an ocean, composed of innumerable drops, which are detached from it when they animate some particular organic body, but reunite themselves to the ocean after the destruction of the organs, you again form a material and gross idea which does not suit the subject and becomes entangled in the same difficulties as the breath. For as the ocean is a collection of drops, God would likewise be an assembly of all the souls, just as a swarm of bees is an assembly of these little animals; but as this swarm is not itself a real substance, it is clear that in this way the universal spirit would not be a true being itself, and instead of saying that it is the only spirit, we should have to say that it is nothing at all in itself, and that there are in nature only individual souls, of which it would be the mass. Moreover these drops, reunited to the ocean of the

universal spirit after the destruction of the organs, would be in reality souls which would exist separated from matter, and we should fall back again into what we wished to avoid, especially if these drops retain something of their preceding state, or have still some functions and could even acquire more sublime ones in the ocean of the divinity or of the universal spirit. For if you wish that these souls, reunited to God, be without any function of their own, you fall into an opinion contrary to reason and all sound philosophy, as if any existing being could ever reach a state where it would be without any function or impression. For one thing because it is joined to another does not therefore cease to have its own particular functions, which joined with those of the other, produce the functions of the whole. Otherwise the whole would have none, if the parte had none. Besides I have elsewhere proved that every being retains perfectly all the impressions it has received, although these impressions may not be perceptible singly, because they are joined with so many others. So the soul reunited to the ocean of souls, would always remain the particular soul it had been while separated.

This shows that it is more reasonable and more in conformity with the custom of nature to allow individual souls to exist in the animals themselves, and not outside in God, and so to preserve not only the soul but also the animal, as I have explained above and elsewhere; and thus to allow individual souls to remain always in activity, that is, in the particular functions which are peculiar to them and which contribute to the beauty and order of the universe, instead of reducing them to the sabbath in God of the Quietists, that is to say, to a state of idleness and uselessness. For as far as the beatific vision of blessed souls is concerned, it is compatible with the functions of their glorified bodies, which will not cease to be, in their way, organic.

But if some one wished to maintain that there are no individual souls, not even when the function of feeling and of thought takes place with the aid of

the organs, he would be refuted by our experience which teaches us, as it seems to me, that we are a something in particular, which thinks, which perceives, which wills; and that we are distinct from another something which thinks and which wills other things.

Otherwise we fall into the opinion of Spinoza, or of some other similar authors, who will have it that there is but one substance, namely God, which thinks, believes and wills one thing in me, but which thinks, believes and wills exactly the contrary in another; an opinion of which M. Bayle, in certain portions of his Dictionary, has well shown the absurdity.

Or, if there is nothing in nature but the universal spirit and matter, we would have to say that if it is not the universal spirit itself which believes and wills opposite things in different persons, it is matter which is different and acts differently; but if matter acts, of what use is the universal spirit? If matter is nothing but an original passive substance, or a passive substance only, how can these actions be attributed to it? It is therefore much more reasonable to believe that besides God, who is the supreme activity, there are a number of individual active beings, since there are a number of particular and opposite actions and passions, which could not be attributed to the same subject; and these active beings are the individual souls.

We know also that there are degrees in all things. There is an infinity of degrees between any movement and perfect repose, between hardness and a perfect fluidity which is without any resistance, between God and nothingness. There is likewise an infinity of degrees between any active being whatsoever and a purely passive being. Consequently it is not reasonable to admit but one active being, namely the universal spirit, with a single passive being, namely matter.

It must also be considered that matter is not a thing opposed to God, but that it is rather opposed to the limited active being, that is, to the soul or to form. For God from whom matter as well as form comes is the supreme

being opposed to nothingness; and the purely passive is something more than nothingness, being capable of something, while nothing can be attributed to nothingness. Thus with each particular portion of matter must be connected the particular forms, — that is, souls and spirits, — which belong to it.

I do not wish here to recur to a demonstrative argument which I have employed elsewhere, and which is drawn from the unities or simple things, among which individual souls are included. For this unavoidably obliges us not only to admit individual souls, but also to avow that they are immortal by their nature, and as indestructible as the universe; and, what is more, that each soul is in its way a mirror of the universe, without any interruption, and that it contains in its depths an order corresponding to that of the universe itself. The souls diversify and represent the universe in an infinity of ways, all different and all true, and multiply it, so to speak, as many times as is possible, so that in this way they approach divinity as much as is possible, according to their different degrees, and give to the universe all the perfection of which it is capable.

After this, I do not see on what reason or probability the doctrine of individual souls can be combated. Those who do so, admit that what is in us is an effect of the universal spirit. But the effects of God are subsistent, not to say that even the modifications and effects of creatures are in a way durable, and that their impressions only unite without being destroyed. Therefore, if in accordance with reason and experience, as we have shown, the animal, with its more or less distinct perceptions and with certain organs, always subsists, and if consequently this effect of God subsists always in these organs, why would it not be permissible to call it the soul, and to say that this effect of God is a soul, immaterial and immortal, which imitates in a way the universal spirit? Since this doctrine, moreover, does

away with all difficulties, as appears by what I have just said here and in other writings, which I have produced on these subjects.

ON THE SUPERSENSIBLE ELEMENT IN KNOWLEDGE, AND ON THE IMMATERIAL IN NATURE: A LETTER TO QUEEN CHARLOTTE OF PRUSSIA, 1702.

[From the French.]

MADAME:

The letter written not long since from Paris to Osnabrück and which I recently read, by your order, at Hanover, seemed to me truly ingenious and beautiful. And as it treats of the two important questions, *Whether there is something in our thoughts which does not come from the senses,* and *Whether there is something in nature which is not material,* concerning which I acknowledge that I am not altogether of the opinion of the author of the letter, I should like to be able to explain myself with the same grace as ‘he, in order to obey the commands and to satisfy the curiosity of your Majesty.

We use the external senses as, to use the comparison of one of the ancients, a blind man does a stick, and they make us know their particular objects which are colors, sounds, odors, flavors, and the qualities of touch, but they do not make us know what these sensible qualities are nor in what they consist. For example, whether red is the revolving of certain small globules which it is claimed cause light, whether heat is the whirling of a very fine dust, whether sound is made in the air as circles in the water when a stone is thrown into it, as certain philosophers claim; this is what we do not see. And we could not even understand how this revolving, these whirlings and these circles if they should be real should cause exactly these perceptions which we have of red, of heat, of noise. Thus it may be said that *sensible qualities* are in fact *occult qualities,* and that there must be others

more manifest which can render the former more explicable. And far from understanding only sensible things, it is exactly these which we understand the least. And although they are familiar to us we do not understand them the better for that; as a pilot understands no better than another person the nature of the magnetic needle which turns toward the north, although he has it always before his eyes in the compass, and although he does not admire it any the more for that reason.

I do not deny that many discoveries have been made concerning the nature of these occult qualities, as, for example, we know by what kind of refraction blue and yellow are formed, and that these two colors mixed form green; but for all this we cannot yet understand how the perception which we have of these three colors results from these causes. Also we have not even nominal definitions of such qualities by which to explain terms. The purpose of nominal definitions is to give sufficient marks by which the thing may be recognized; for example, assayers have marks by which they distinguish gold from every other metal, and even if a man had never seen gold these signs might be taught him so that he would infallibly recognize it if he should some day meet with it. But it is not the same with these sensible qualities, and marks to recognize blue, for example, could not be given if we had never seen it. So that blue is its own mark, and in order that a man may know what blue is it must necessarily be shown to him.

It is for this reason that we are accustomed to say that the *notions* of these qualities are *clear,* for they serve to recognize them; but that these same notions are not *distinct*, because we cannot distinguish nor develope that which they include. It is *I know not what* of which we are conscious, but for which we cannot account. Whereas we can make another understand what a thing is of which we have some description or nominal definition, even although we should not have the thing itself at hand to show him. However we must do the senses the justice to say that, in addition to these

occult qualities, they make us know other qualities which are more manifest and which furnish more distinct notions. And these are those which we ascribe to *common sense,* because there is no external sense to which they are particularly attached and belong. And here definitions of the terms or words employed may be given. Such is the idea of *numbers,* which is found equally in sounds, colors, and touches. It is thus that we perceive also *figures,* which are common to colors and to touches, but which we do not notice in sounds. Although it is true that in order to conceive distinctly numbers and even figures, and to form sciences of them, we must come to something which the senses cannot furnish, and which the understanding adds to the senses.

As therefore our soul compares (for example) the numbers and figures which are in colors with the numbers and figures which are found by the touch, there must be an *internal sense,* in which the perceptions of these different external senses are found united. This is what is called the *imagination,* which comprises at once the *notions of the particular,* which are *clear* but *confused,* and the *notions of the common sense,* which are clear and distinct. And these clear and distinct ideas which are subject to the imagination are the objects of the *mathematical sciences,* namely of arithmetic and geometry, which are *pure* mathematical sciences, and of the application of these sciences to nature, forming mixed mathematics. It is evident also that particular sensible qualities are susceptible of explanations and of reasonings only in so far as they involve what is common to the objects of several external senses, and belong to the internal sense. For those who try to explain sensible qualities distinctly always have recourse to the ideas of mathematics, and these ideas involve *size* or multitude of parts. It is true that the mathematical sciences would not be demonstrative, and would consist in a simple induction or observation, which would never assure us of the perfect generality of the truths there found, if something

higher and which intelligence alone can furnish did not come to the aid of the *imagination* and the *senses.*

There are, therefore, objects of still other nature, which are not included at all in what is observed in the objects of the senses in particular or in common, and which consequently are not objects of the imagination either. Thus besides the *sensible* and *imageable,* there is that which is purely *intelligible,* as being the *object of the understanding atone,* and such is the object of my thought when I think of myself This thought of the *Ego,* which perceives sensible objects, and of my own action resulting therefrom, adds something to the objects of the senses. To think a color and to observe that one thinks it, are two very different thoughts, as different as the color is from the Ego which thinks it. And as I conceive that other beings may also have the right to say *I,* or that it could be said for them, it is through this that I conceive what is called *substance* in general, and it is also the consideration of the Ego itself which furnishes other *metaphysical* notions, as cause, effect, action, similarity, etc. and even those of *logic* and of *ethics.* Thus it can be said that there is nothing in the understanding which does not come from the senses, except the understanding itself, or that which understands.

There are then three grades of notions: the *simply sensible*, which are the objects appropriate to each sense in particular; the *sensible and at the same time intelligible*, which pertain to the common sense; and the *simply intelligible*, which belong to the understanding. The first and the second are both imageable, but the third are above the imagination. The second and third are intelligible and distinct; but the first are confused, although they are clear or recognizable.

Being itself and truth are not known wholly through the senses, for it would not be impossible for a creature to have long and orderly dreams, resembling our life, of such a sort that everything which it thought it

perceived through the senses would be but a mere appearance. There must therefore be something beyond the senses, which distinguishes the true from the apparent. But the truth of the demonstrative sciences is exempt from these doubts, and must even serve for judging of the truth of sensible things. For as able philosophers, ancient and modern, have already well remarked: — if all that I should think that I see should be but a dream, it would always be true that I who think while dreaming, would be something, and would actually think in many ways, for which there must always be some reason.

Thus what the ancient Platonists have observed is very true, and is very worthy of being considered, that the existence of sensible things and particularly of the *Ego* which thinks and which is called spirit or soul, is incomparably more sure than the existence of sensible things; and that thus it would not be impossible, speaking with metaphysical rigor, that there should be at bottom only these intelligible substances, and that sensible things should be but appearances. While on the other hand our lack of attention makes us take sensible things for the only true things. It is well also to observe that if I should discover any demonstrative truth, mathematical or otherwise, while dreaming (as might in fact be), it would be just as certain as if I had been awake. This shows us how intelligible truth is independent of the truth or of the existence outside of us of sensible and material things.

This conception of *being* and of *truth* is found therefore in the Ego and in the understanding, rather than in the external senses and in the perception of exterior objects.

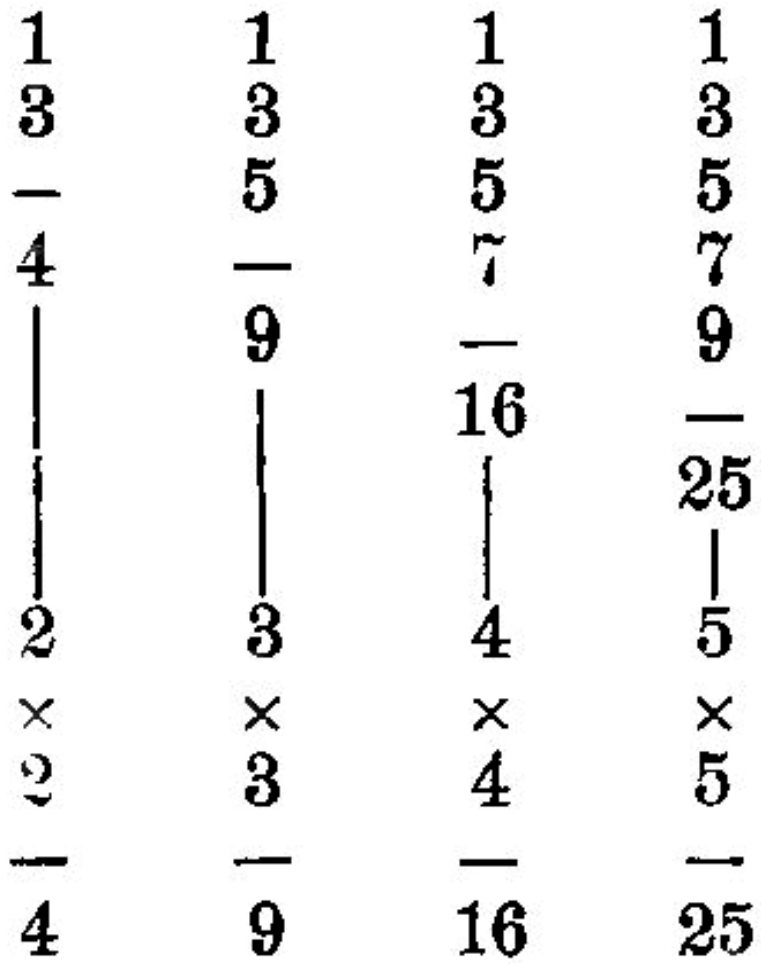
There we find also what it is to affirm, to deny, to doubt, to will, to act. But above all we find there the *force of the consequences* of reasoning, which are a part of what is called the *natural light.* For example, from this premise, that *no wise man is wicked*, we may, by reversing the terms, draw this conclusion, that *no wicked man is wise.* Whereas from this sentence,

that *every wise man is praiseworthy,* we cannot conclude by reversing it, that *every one praiseworthy is wise* but only that *some praiseworthy ones are wise.* Although we may always reverse particular affirmative propositions, for example, if *some wise man is rich* it must also he that *some rich men are wise,* this cannot he done in particular negatives. For example, we may say that *there are charitable persons who are not just,* which happens when charity is not sufficiently regulated; but we cannot infer from this that *there are just persons who are not charitable;* for in justice are included at the same time charity and the rule of reason.

It is also by this *natural light* that the *axioms* of mathematics are recognized; for example, that *if from two equal things the same quantity he taken away the things which remain are equal;* likewise that *if in a balance everything is equal on the one side and on the other, neither will incline,* a thing which we foresee without ever having experienced it. It is upon such foundations that we establish arithmetic, geometry, mechanics and the other demonstrative sciences, in which, in truth, the senses are very necessary, in order to have certain ideas of sensible things, and experiences are necessary to establish certain facts, and even useful to verify reasonings as by a kind of proof. But the force of the demonstrations depends upon intelligible notions and truths, which alone are capable of making us discern what is necessary, and which, in the conjectural sciences, are even capable of determining demonstratively the degree of probability, concerning certain given suppositions, in order that we may choose rationally among opposite appearances, the one which is greatest. Nevertheless this part of the art of reasoning has not yet been cultivated as much as it ought to be.

But to return to *necessary truths,* it is universally true that we know them only by this natural light, and not at all by the experiences of the senses. For the senses can very well make known in some way what is, but they cannot make known what *ought to be* or could not be otherwise.

For example, although we may have experienced numberless times that every massive body tends toward the centre of the earth and is not sustained in the air, we are not sure that this is necessary as long as we do not understand the reason of it. Thus we could not be sure that the same thing would occur in air at a higher altitude, at a hundred or more leagues above us, and there are philosophers who imagine that the earth is a magnet, and as the ordinary magnet does not attract the needle when a little removed from it, they think that the attractive force of the earth dues not extend very far either. I do not say that they are right, but I do say that one cannot go very certainly beyond the experiences he has had, if he is not aided by reason.



This is why the geometricians have always considered that what is only proved by *induction* or by examples in geometry or in arithmetic, is never perfectly proved. For example, experience teaches us that odd numbers continuously added together produce the square numbers, that is to say, those which come from multiplying a number by itself. Thus 1 and 3 make 4, that is to say 2 times 2, and 1 and 3 and 5 make 9, that is to say 3 times 3. And 1 and 3 and 5 and 7 make 16, that is 4 times 4. And 1 and 3 and 5 and 7 and 9 make 25, that is 5 times 5. And so on.

However, if one should experience it a hundred thousand times, continuing the calculation very far, he may reasonably think that this will

always follow; but we do not therefore have absolute certainty of it, unless we learn the demonstrative reason which the mathematicians found out long ago. And it is on this foundation of the uncertainty of inductions, but carried a little too far, that an Englishman has lately wished to maintain that we can avoid death. For (said he) the consequence is not good, my father, my grandfather, my great-grandfather are dead and all the others who have lived before us; therefore we shall also die. For their death has no influence on us. The trouble is that we resemble them a little too much in this respect that the causes of their death subsist also in us. For the resemblance would not suffice to draw sure consequences without the consideration of the same reasons.

In truth there are *experiments* which succeed numberless times and ordinarily, and yet it is found in some extraordinary cases that there are *instances* where the experiment does not succeed. For example, if we should have found a thousand times that iron put all alone on the surface of water goes to the bottom, we are not sure that this must always happen. And without recurring to the miracle of the prophet Elisha who made the iron float, we know that an iron pot may he made so hollow that it floats, and that it can even carry besides a considerable weight, as do boats of copper or of tin. And even the abstract sciences like geometry furnish cases in which what ordinarily occurs no longer. For example, we ordinarily find that two lines which continually approach each other finally meet, and many people will almost swear that this could never be otherwise. And nevertheless geometry furnishes us with extraordinary lines, which are for this reason called *asymptotes*, which prolonged *ad infinitum* continually approach each other, and nevertheless never meet.

This consideration shows also that there is a *light born with us.* For since the senses and inductions could never teach us truths which are thoroughly universal, nor that which is absolutely necessary, but only that which is, and

that which is found in particular examples; and since we nevertheless know necessary and universal truths of the sciences, a privilege which we have above the brutes; it follows that we have derived these truths in part from what is within us. Thus we may lead a child to these by simple interrogations, after the manner of Socrates, without telling him anything, and without making him experiment at all upon the truth of what is asked him. And this could very easily be practised in numbers and other similar, matters.

I agree, nevertheless, that in the present state the external senses are necessary to us for thinking, and that, if we had none, we could not think. But that which is necessary for something does not for all that constitute its essence. Air is necessary for life, but life is something else than air. The senses furnish us the matter for reasoning, and we never have thoughts so abstract that something from the senses is not mingled therewith; but reasoning requires something else in addition to what is from the senses.

As to the *second question,* whether there are *immaterial substances,* in order to solve it, it is first necessary to explain one's self. Hitherto by matter has been understood that which includes only notions purely passive and indifferent, namely, extension and impenetrability, which need to be determined by something else to some form or action. Thus when it is said that there are immaterial substances, it is thereby meant that there are substances which include other notions, namely, perception and the principle of action or of change, which could not be explained either by extension or by impenetrability. These beings, when they have feeling, are called *souls,* and when they are capable of reason, they are called spirits. Thus if one says that force and perception are essential to matter he takes matter for corporeal substance which is complete, which includes form and matter, or the soul with the organs. It is as if it were said that there were souls everywhere. This might be true, and would not be contrary to the

doctrine of immaterial substances. For it is not intended that these souls be outside of matter, but simply that they are something more than matter, and are not produced nor destroyed by the changes which matter undergoes, nor subject to dissolution, since they are not composed of parts.

Nevertheless it must be avowed also that there is *substance separated from matter.* And to see this, one has only to consider that there are numberless forms which matter might have received in place of the series of variations which it has actually received. For it is clear, for example, that the stars could move quite otherwise, space and matter being indifferent to every kind of motion and figure.

Hence the reason or universal determining cause whereby things are, and are as they are rather than otherwise, must be outside of matter. And even the existence of matter depends thereon, since we do not find in its notion that it carries with it the reason of its existence.

Now this ultimate reason of things, which is common to them all and universal by reason of the connection existing between all parts of nature, is what we call *God,* who must necessarily be an infinite and absolutely perfect substance. I am inclined to think that all immaterial finite substances (even the genii or angels according to the opinion of the ancient Church Fathers) are united to organs, and accompany matter, and even that souls or active forms are everywhere found in it. And matter, in order to constitute a substance which is complete, cannot do without them, since force and action are found everywhere in it, and since the laws of force depend on certain remarkable metaphysical reasons or intelligible notions, without being explicable by notions merely material or mathematical, or which belong to the sphere of the imagination.

Perception also could not be explained by any mechanism whatsoever. *We* may therefore conclude that there is in addition something immaterial everywhere in these creatures, and particularly in us, in whom this force is

accompanied by a sufficiently distinct perception, and even by that light, of which I have spoken above, which makes us resemble in miniature the Divinity, as well by knowledge of the order, as by the ordering which we ourselves know how to give to the things which are within our reach, in imitation of that which God gives to the universe. It is in this also that our *virtue* and perfection consist, as our *felicity* consists in the pleasure which we take therein.

And since every time we penetrate into the depths of things, we find there the most beautiful order we could wish, even surpassing what we have therein imagined, as all those know who have fathomed the sciences; we may conclude that it is the same in all the rest, and that not only immaterial substances subsist always, but also that their lives, progress and changes are regulated for advance toward a certain end, or rather to approach more and more thereto, as do the asymptotes. And although we sometimes recoil, like lines which retrograde, advancement none the less finally prevails and wins.

The natural light of reason does not suffice for knowing the detail thereof, and our experiences are still too limited to catch a glimpse of the laws of this order. The revealed light guides us meanwhile through faith, but there is room to believe that in the course of time we shall know them even more by experience, and that there are spirits which know them already more than we do.

Meanwhile the philosophers and the poets, for want of this, have betaken themselves to the fictions of metempsychosis or of the Elysian Fields, in order to give some ideas which might strike the populace. But the consideration of the perfection of things or (what is the same thing) of the sovereign power, wisdom and goodness of God, who does all for the best, that is to say, in the greatest order, suffices to render content those who are reasonable, and to make us believe that the contentment ought to be greater, according as we are more disposed to follow order or reason.

X XIV.

AN EXPLANATION OF CERTAIN POINTS IN HIS PHILOSOPHY: AN EXTRACT FROM A LETTER TO LADY MASHAM. 1704.

[From the French.]

AS I AM altogether in favor of the principle of uniformity, which I think nature observes in the heart of things while it varies in ways, degrees and perfections, my whole hypothesis amounts to recognizing in substances which are removed from our view and observation, something parallel to what appears in those which are within our reach. Thus, taking now for granted that there is in us a simple being endowed with action and perception, I think that nature would be little connected, if this particle of matter which forms human bodies were alone endowed with that which would make it infinitely different from the rest (even in physics) and altogether heterogeneous in relation to all other known bodies. This makes me think that there are everywhere present such active beings in matter, and that there is no difference between them except in the manner of perception. And as our own perceptions are sometimes accompanied by *reflection* and sometimes not, and as from reflection come *abstractions and universal and necessary truths,* no traces of which are to be seen in brutes and still less in the other bodies which surround us, there is reason for believing that this simple being which is in us and which is called soul is distinguished by this from those of other known bodies.

Whether now these principles of action and of perception be called FORMS, ENTELECHIES, SOULS, SPIRITS, or whether these terms be distinguished according to the notions one would like to attribute to them, the things will not thereby be changed. You will ask what these simple

beings or these souls which I place in brutes and in the other creatures as far as they are organic, will become; I reply, that they must not be less inextinguishable than our souls, and that they cannot be produced or destroyed by the forces of nature.

But further, to preserve the analogy of *the future or past* as well as of *other* bodies with what we experience at *present* in *our* bodies, I hold that not only these souls or entelechies all have a sort of organic body with them proportioned to their perceptions but also that they will always have one, and have always had one, as long as they have existed; so that not only the soul but also the animal itself (or that which is analogous to soul and animal, not to dispute about names) remains. And that thus generation and death can only be developments and envelopments, some examples of which nature, according to its custom, shows us visibly to aid us in divining that which is hidden. And consequently neither iron nor fire nor any other violences of nature, whatever ravages they may make in the body of an animal, can prevent the soul from preserving a certain organic body, inasmuch as the ORGANISM, that is to say, order and artifice, is something essential to matter, produced and arranged by sovereign wisdom, and the production must always retain the traces of its author. This leads me to think also that there are no spirits entirely separated from matter except the first and sovereign being, and that the genii, however marvellous they may be, are always accompanied by bodies worthy of them. This must also be said of souls which nevertheless may be called separate by relation to this gross body. You see therefore, Madame, that all this is only to suppose that *it is everywhere and Always just as with us and at present* (the supernatural excepted), except degrees of perfections which vary; and I leave you to judge if an hypothesis at least simpler and more intelligible can be thought of.

This very maxim, *not to suppose unnecessarily anything in creatures except what corresponds to our experiences*, has led me to my *System of the Preestablished Harmony.* For we experience that bodies act among themselves according to mechanical laws, and that souls produce in themselves some internal actions. And we see no way of conceiving the action of the soul upon matter, or of matter upon the soul, or anything corresponding to it; it not being explicable by any machine whatever how material variations, that is to say, mechanical laws, cause perception to arise; nor how perception can produce change of velocity or of direction in animal spirits and other bodies, however subtile or gross they may be. Thus the inconceivability of another hypothesis as much as the good order of nature which is always uniform (without speaking here of other considerations), have made me believe that the soul and the body follow perfectly their laws, each one its own separately, without the laws of the body being troubled by the actions of the soul and without bodies finding windows through which to influence souls. It will be asked then whence comes this accord of the soul with the body. The defenders of *occasional causes* teach that God accommodates at each moment the soul to the body and the body to the soul. But it being impossible that this be other than miraculous, it is unsuited to a philosophy which must explain the ordinary course of nature, for it would be necessary that God should continually disturb the natural laws of bodies. This is why I believed that it was infinitely more worthy of the economy of God and of the uniformity and harmony of his work, to conclude that he has at the beginning created souls and bodies such that each following its own laws accords with the other. It cannot be denied that this is possible to him whose wisdom and power are infinite. In this I still only attribute to souls and to bodies for all time and everywhere what we experience in them every time that the experience is distinct, that is to say, mechanical laws in bodies and internal actions in the

soul: the whole consisting only in the present state joined with the tendency to changes, which take place in the body according to the moving forces and in the soul according to the perceptions of good and evil.

The only surprising thing which follows from this is that the works of God are infinitely more beautiful and more harmonious than had been believed. And it may be said that the subterfuge of the Epicureans against the argument drawn from the beauty of visible things (when they say that among numberless productions of chance it is not to be marvelled at if some world like our own has succeeded passably) is destroyed, in that the perpetual correspondence of beings which have no influence one upon the other can only come from a common cause of this harmony. M. Bayle (who is profound), having meditated on the consequences of this hypothesis, acknowledges that one never exalted more what we call the divine perfections, and that the infinite wisdom of God, great as it is, is not too great to produce such a pre-established harmony, the possibility of which he seemed to doubt. But I made him consider that even men produce *automata* which act as if they were rational and that God (who is an infinitely greater artist or, rather, with whom everything is art as much as is possible), in order to make matter act as minds require, has traced out for it its path. So that after this we ought not to be more surprised at the fact that it acts with so much reason, than at the course of certain serpents in fireworks along an unseen cord, which shows that it is a man who manages them. The designs of God can only he grasped in proportion to the perfections found in them, and bodies being subjected to souls in advance in order to be accommodated to their voluntary actions, the soul in its turn is expressive of bodies in virtue of its primordial nature, being obliged to represent them by its involuntary and confused perceptions. Thus each one is the original or the copy of the other in proportion to the perfections or imperfections which it involves.

CONSIDERATIONS ON THE PRINCIPLES OF LIFE, AND ON PLASTIC NATURES; BY THE AUTHOR OF THE SYSTEM OF PREËSTABLISHED HARMONY. 1705.

[From the French.]

AS THE DISPUTE which has arisen on *plastic natures* and on the *principles of life* has given celebrated persons who are interested in it occasion to speak of my system, of which some explanation seems to be demanded, I have thought it would be in place to add something to what I have already published on the subject in various passages of the Journals quoted by Bayle in his Dictionary, article *Borarius.* I really admit principles of life diffused throughout all nature, and immortal since they are indivisible substances or UNITS, as bodies are multitudes liable to perish by dissolution of their parts. These principles of life or these souls have perception or desire. When I am asked if there are substantial forms, I reply in making a distinction. For if this term is taken as Descartes takes it when he maintains against Regis that the rational soul is the substantial form of man, I will answer, Yes. But I answer, No, if the term is taken as those take it who imagine that there is a substantial form of a piece of stone, or of any other non-organic body; for the principles of life belong only to organic body. It is true (according to my system) that there is no portion of matter in which there are not numberless organic and animated bodies; under which I include not only animals and plants, but perhaps also other kinds which are entirely unknown to us. But for all this, it must not be said that each portion of matter is animated, just as we do not say that a pond full of fishes is an animated body, although a fish is.

However, my opinion on the *principles of life* is in certain points different from that hitherto taught. One of these points is that all have believed that these principles of life change the course of the motion of bodies, or at least give occasion to God to change it, whereas, according to my system, this course is not changed at all in the order of nature, God having pre-established it as it ought to be. The Peripatetics believed that souls had an influence on bodies and that according to their will or desire they gave some impression to bodies. And the celebrated authors who have given occasion for the present dispute, by their principles of life and their plastic natures, have held the same view, although they are not Peripatetics. We cannot say as much of those who have employed αρχαι, or hylarchic principles, or other immaterial principles under different names. Descartes having well recognized that there is a law of nature, according to which the same quantity of force is preserved (although he was deceived in its application in confounding quantity of force with quantity of motion), believed that we ought not to ascribe to the soul the power of increasing or diminishing the force of bodies, but simply that of changing their direction, by changing the course of the animal spirits. And those Cartesians, who have introduced the doctrine of Occasional Causes, believed that the soul not being able to exert any influence on body, it was necessary that God should change the course or direction of the animal spirits according to the volitions of the soul. But if at the time of Descartes the new law of nature, which I have demonstrated, had been known, which affirms that not only the same quantity of total force of bodies which are in communication, but also their total direction, is preserved, he would probably have discovered my system of Preestablished Harmony. For he would have recognized that it is as reasonable to say that the soul does not change the quantity of the direction of bodies, as it is reasonable to deny to the soul the power of changing the quantity of their force, both being equally contrary to the order

of things and to the laws of nature, as both are equally inexplicable. Thus, according to my system, souls or the principles of life do not change anything in the ordinary course of bodies, and do not even give to God *occasion* to do so. Souls follow their laws which consist in a certain development of perceptions, according to the goods and the evils; and bodies also follow their laws, which consist in the laws of motion; and nevertheless these two beings of entirely different kind are in perfect accord, and correspond like two clocks perfectly regulated on the same basis, although perhaps of an entirely different construction. This is what I call Pre-established Harmony, which removes all notion of miracle from purely natural actions, and makes things run their course regulated in an intelligible manner; whereas the common system has recourse to absolutely inexplicable influences, and in that of Occasional Causes, God, by a sort of general law and as if by agreement, is obliged to change at each moment the natural course of the thoughts of the soul to accommodate them to the impressions of the body, and to disturb the natural course of the motions of bodies according to the volitions of the soul; that which can only be explained by a perpetual miracle, while I explain it quite intelligibly by the natures which God has established in things.

My system of Pre-established Harmony furnishes a new proof, hitherto unknown, of the existence of God, since it is quite manifest that the agreement of so many substances, of which the one has no influence upon the other, could only come from a general cause, on which all of them depend, and that this must have infinite power and wisdom to pre-establish all these harmonies. M. Bayle himself has thought that there never has been an hypothesis which so sets in relief the knowledge which we have of the divine wisdom. The system has moreover the advantage of preserving in all its rigor and generality the great principle of physics that a body never receives change in its motion except by another body in motion which

impels it. *Corpus non moveri nisi impulsum a corpore contiguo et moto.* This law has been violated hitherto by all those who have admitted souls or other immaterial principles, all Cartesians included. The followers of Democritus, Hobbes, and some other thorough-going materialists, who have rejected all immaterial substance, having alone up to this time preserved this law have believed that they found therein ground for insulting other philosophers, as if they thus maintained a very irrational opinion. But the ground of their triumph has been but apparent and *ad homimem;* and far from serving them, it serves to confound them, and now, their illusion being discovered and their advantage turned against them, it seems that it may be said that it is the first time that the best philosophy shows itself also the most conformed in all respects to reason, nothing remaining which can be opposed to it. This general principle, although it excludes particular first movers, by making us deny this quality to soul or to immaterial created principles, leads us so much the more surely and clearly to the universal first mover, from whom comes equally the succession and harmony of perceptions. They are like two kingdoms, the one of efficient causes, the other of final; each of which separately suffices in detail for explaining all as if the other did not exist. But the one does not suffice without the other in what is general of their origin, for they emanate from a source in which the power which constitutes efficient causes and the wisdom which regulates final causes are found united. This maxim also, that there is no motion which has not its origin in another motion, according to laws of mechanics, leads us again to the first mover, because matter being indifferent in itself to all motion or rest, and nevertheless always possessing motion with all its force and direction, it could not have been put in it except by the author himself of matter.

There is still another difference between the opinions of other authors who favor the principles of life, and mine. It is that I believe at the same

time both that these principles of life are immortal and that they are everywhere; whereas according to the common opinion the souls of brutes perish, and according to the Cartesians, man only has really a soul and even perception and desire; an opinion which will never be approved, and which has only been embraced because it was seen that it was necessary either to accord to brutes immortal souls or to avow that the soul of man might be mortal. But it ought rather to have been said that every simple substance being imperishable and every soul being consequently immortal, that which could not be reasonably refused, to brutes, cannot fail also to subsist always, although in a way very different from our own, since brutes, as far as can be judged, are lacking in that reflection which makes us think of ourselves. And we do not see why men have been so loath to accord to the bodies of other organic creatures immaterial, imperishable substances, since the defenders of atoms have introduced material substances which do not perish, and since the soul of the brute has no more reflection than an atom. For there is a broad difference between feeling which is common to these souls and the reflection which accompanies reason, since we have a thousand feelings without reflecting upon them; and I do not think that the Cartesians have ever proved or can prove that every perception is accompanied by consciousness. It is reasonable also that there may be substances capable of perception below us as there are above; and that our soul far from being the last of all is in a middle position from which one may descend and ascend, otherwise there would be a defect of order which certain philosophers call *vacuum formarum.* Thus reason and nature lead men to the opinion I have just propounded; but prejudices have turned them aside from it.

This view leads us to another where I am again obliged to diverge from the received opinion. It will be asked of those who are of my opinion what the souls of brutes will do after the death of the animal, and they will

impute to us the dogma of Pythagoras who believed in the transmigration of souls, which not only the late M. Van Helmont, the younger, but also an ingenious author of certain Metaphysical Meditations, published at Paris, have wished to revive. But it must be known that I am far from this opinion, because I believe that not only the soul but also the same animal subsists. Persons very accurate in experiments have already in our day perceived that it may be doubted whether an altogether new animal is ever produced, and whether animals wholly alive as well as plants are not already in miniature in germs before conception. This doctrine being granted, it will be reasonable to think that what does not begin to live also does not cease to live, and that death like generation is only the transformation of the same animal which is sometimes augmented and sometimes diminished. This again reveals to us hitherto unthought-of marvels of divine contrivance. This is, that the machines of nature being machines even to their smallest parts are indestructible, by reason of the envelopment of one little machine in a greater *ad infinitum.* Thus one finds one's self obliged at the same time to maintain the pre-existence of the soul as well as of the animal, and the substance of the animal as well as of the soul.

I have gradually been led to explain my view of the formation of plants and animals, since it appears from what I have just said that they are never formed altogether anew. I am therefore of the opinion of Cudworth (the greater part of whose excellent work pleases me extremely) that the laws of mechanics alone could not form an animal where there is nothing yet organized; and I find that with reason he is opposed to what some of the ancients have imagined on this subject and even Descartes in his L'Homme, the formation of which costs him so little, but which is also very far from being a real man. And I reinforce this opinion of Cudworth by presenting for consideration the fact that matter arranged by divine wisdom must be essentially organized throughout, and that thus there is a machine in the

parts of the natural machine ad infinitum, and so many envelopes and organic bodies enfolded one within another that an organic body never could be produced altogether new and without any preformation; nor could an animal already existing be entirely destroyed. Thus I have no need to resort with Cudworth to certain immaterial plastic natures, although I remember that Julius Scaliger and other Peripatetics and also certain partisans of the Helmontian doctrine of Archæi have believed that the soul manufactures its own body. I may say of it *non mi bisogna, e non mi basta,* for the very reason of the preformation and organism *ad infinitum* which furnishes me the material plastic natures suited to the requirements of the case; whereas the immaterial plastic principles are as little necessary as they are little capable of satisfying the ease. For since the animals are never formed naturally of a non-organic mass, the mechanism incapable of producing *de novo* these infinitely varied organs can very well derive them through the development and through the transformation of a pre-existing organic body. Meanwhile those who employ plastic natures whether material or immaterial in no wise weaken the proof of the existence of God drawn from the marvels of nature, which appear particularly in the structure of animals, provided that these defenders of immaterial plastic natures, add a particular direction from God, and provided that those who with me make use of a material cause in assenting to plastic mechanism, maintain not only a continual preformation, but also an original divine pre-establishment. Thus whatever way we take we cannot overlook the divine existence in wishing to explain these marvels, which have always been admired but which have never been more apparent than in my system.

We see by this that not only the soul but also the annual must subsist always in the ordinary course of things. But the laws of nature are made and applied with so much order and so much wisdom that they serve more than one end, and God, who occupies the position of inventor and architect as

regards the mechanism of nature, occupies the position of king and father to substances possessing intelligence, and of these the soul is a spirit formed after his image. And as regards spirits, his kingdom, of which they are the citizens, is the most perfect monarchy which can be invented; in which there is no sin which does not bring upon itself some punishment, and no good action without some recompense; in which everything tends finally to the glory of the monarch and the happiness of the subjects, by the most beautiful combination of justice and goodness which can be desired. Nevertheless I dare not assert anything positively either as regards pre-existence or as regards the details of the future condition of human souls, since God might make use of extraordinary ways in the kingdom of grace; nevertheless that which natural reason favors ought to be preferred, at least if Revelation does not teach us the contrary, a point which I do not here undertake to decide.

Before ending, it will perhaps be well to note, among the other advantages of my system, that of the universality of the laws which I employ, which are always without exception in my general philosophy: and it is just the opposite in other systems. For example, I have already said that the laws of mechanics are never violated in natural motions, that the same force is always preserved, as also the same direction, and that everything takes place in souls as if there were no body, and that everything takes place in bodies as if there were no souls; that there is no part of space which is not full; that there is no particle of matter which is not actually divided, and which does not contain organic bodies; that there are also souls everywhere, as there are bodies everywhere; that souls and the same animals always subsist; that organic bodies are never without souls, and that souls are never separated from all organic body; although it is nevertheless true that there is no portion of matter of which it can be said that it is always affected by the same soul. I do not admit then that there are naturally souls entirely

separated, nor that there are created spirits entirely detached, from all body, in which I am of the opinion of several ancient Church Fathers. God only is above all matter, since he is its author; but creatures, free or freed from matter, would be at the same time detached from the universal concatenation, and like deserters from the general order. This universality of laws is confirmed by its great facility of explanation, since the uniformity, which I think is observed in all nature, brings about that everywhere else, in all time and in every place, it can be said that *all is as it is here,* to the degrees of greatness and of near perfection; and that thus those things which are farthest removed and most concealed are perfectly explained by the analogy of what is visible and near to us.

LETTER TO M. COSTE ON NECESSITY AND CONTINGENCY. 1707.

[From the French],

HANOVER, DEC. 19, 1707.

To M. COSTE, London:

I thank you very much for communicating to me the last additions and corrections of Locke, and I am pleased also to learn what you tell me of his last dispute with Limborch. The liberty of indifference, about which the dispute turns and my opinion of which you, sir, ask, consists in a certain subtilty which few people trouble themselves to understand and of which many people nevertheless reason. This carries us back to the consideration of necessity and of contingency.

A truth is *necessary* when the opposite involves contradiction, and when it is not necessary it is called *contingent.* It is a necessary truth that God exists, that all right angles are equal, etc. but that I myself exist, and that there are bodies in nature which show an angle actually right, are contingent truths. For the whole universe might be otherwise; time, space, and matter being absolutely indifferent to motions and forms. And God has chosen among an infinite number of possibles what he judged most fit. But since he has chosen, it must be affirmed that everything is comprised in his choice and that nothing could he changed, since he has once for all foreseen and regulated all; he who could not regulate things piecemeal and by fits and starts. Therefore the sins and evils which he has judged proper to permit for greater goods are comprised in his choice. This is the necessity, which can

now be ascribed to things in the future, which is called *hypothetical or consequent* necessity (that is to say, founded upon the consequence of the hypothesis of the choice made), which does not destroy the contingency of things, and does not produce that absolute necessity which contingency does not allow. And nearly all theologians and philosophers (for we must except the Socinians) acknowledge the hypothetical necessity which I have just explained, and which cannot he combated without overthrowing the attributes of God and even the nature of things.

Nevertheless, although all the facts of the universe are now certain in relation to God, or (what amounts to the same thing) are determined in themselves and even linked among themselves, it does not follow that their connection is always truly necessary; that is to say, that the truth, which pronounces that one fact follows another, is necessary. And this must be applied particularly to *voluntary actions.* When a choice is proposed, for example to go out or not to go out, it is a question whether, with all the circumstances, internal and external, motives, perceptions, dispositions, impressions, passions, inclinations taken together, I am still in a contingent state, or whether I am necessitated to make choice, for example, to go out; that is to say, whether this proposition true and determined in fact, *In all these circumstances taken together I shall choose to go out*, is contingent or necessary. To this I reply that it is contingent, because neither I nor any other mind more enlightened than I, could demonstrate that the opposite of this truth implies contradiction. And supposing that by *liberty of indifference* is understood a liberty opposed, to necessity (as I have just explained it), I acknowledge this liberty for I am really of opinion that our liberty, as well as that of God and of the blessed spirits, is exempt not only from co-action but furthermore from absolute necessity, although it can not be exempt from determination and from certainty.

But I find that there is need of great precaution here in order not to fall into a chimera which shocks the principles of good sense, and which would be what I call an *absolute indifference* or *an indifference of equilibrium,* which some conceive in liberty, and which I believe chimerical. It must be observed then that that connection of which I just spoke is not necessary, speaking absolutely, but that it is none the less certainly true, and that in general every time that in all the circumstances taken together the balance of deliberation is heavier on the one side than on the other, it is certain and infallible that that side will carry the day. God or the perfect sage would always choose, the best that is known, and if one thing was no better than another, they would choose neither. In other intelligent substances passions often take the place of reason, and it can always be said in regard to the will in general that the *choice follows the greatest inclination,* under which I understand passions as well as reasons, true or apparent.

Nevertheless I see that there are people who imagine that we are determined sometimes for the side which is the less weighted, that God chooses sometimes the least good everything considered, and that man chooses sometimes without object and against all his reasons, dispositions, and passions, finally that one chooses sometimes without any reason which determines the choice. But this I hold to be false and absurd, since it is one of the greatest principles of good sense that nothing ever occurs without cause or determining reason. Thus when God chooses it is by reason of the Best, when man chooses it will be the side which shall have struck him most. If moreover he chooses that which he sees to be less useful and less agreeable, it will have become perhaps to him the most agreeable through caprice, through a spirit of contradiction, and through similar reasons of a depraved taste, which would none the less be determining reasons, even if they should not be conclusive reasons. And never can any example to the contrary be found.

Thus although we have a liberty of indifference which saves us from necessity, we never have an indifference of equilibrium which exempts us from determining reasons; there is always something which inclines us and makes us choose, but without being able to necessitate us. And just as God is always infallibly led to the best although he is not led necessarily (other than by a moral necessity), so we are always infallibly led to that which strikes us most, but not necessarily. The contrary not implying any contradiction, it was not necessary or essential that God should create nor that he should create this world in particular, although his wisdom and goodness has led him to it.

It is this that M. Bayle, very subtle as he has been, has not sufficiently considered when he thought that a case similar to the ass of Buridan was possible, and that a man placed in circumstances of perfect equilibrium could none the less choose. For it must be said that the case of a perfect equilibrium is chimerical and never occurs, the universe not being able to be parted or cut into parts equal and alike. The universe is not like an ellipse or other such oval which the straight line drawn through its centre can cut in two congruent parts. The universe has no centre and its parts are infinitely varied, thus the case will never occur where all will be perfectly equal and will strike equally from one side and from the other, and although we are not always capable of perceiving all the little impressions which contribute to determine us, there is always something which determines us between two contradictories, without the ease ever being perfectly equal on the one side and on the other.

Nevertheless, although our choice *ex datis* on all the internal and external circumstances taken together is always determined, and although for the present it does not depend upon us to change the will, it is none the less true that we have great power over our future wills by choosing certain objects of our attention and by accustoming ourselves to certain ways of thinking,

and by this means we can accustom ourselves the better to resist impressions and the better make the reason act, to the end that we can contribute toward making ourselves will what we ought to.

For the rest I have elsewhere shown, that, regarding matters in a certain metaphysical sense, we are always in a state of perfect spontaneity, and that what is attributed to the impressions of external things comes only from confused perceptions in us which correspond to them, and which cannot but be given us at the start in virtue of the pre-established harmony which establishes the connection of each substance with all others.

If it were true, sir, that your Sevennese were prophets, that event would not be contrary to my hypothesis of the Pre-established Harmony and would even be in thorough agreement with it. I have always said that the present is big with the future and that there is a perfect connection between things however distant they may be one from another, so that one of sufficient penetration might read the one in the other. I should not even oppose one who should maintain that there are globes in the universe where prophecies are more common than on our own, as there will perhaps be a world in which dogs will have sufficiently good noses to scent their game at a thousand leagues, perhaps also there are globes in which genii have more freedom than here below to mix in the actions of rational animals. But when the question is to reason on what is actually practised here, our presumptive judgment must be founded on the custom of our globe, where prophetic views of this sort are very rare. We cannot swear that there are none, but we could wager that these in question are not such. One of the reasons which would most lead me to judge favorably of them would be the judgment of M. Fatio but it would be necessary to know his opinion without taking it from the newspaper. If you had with all due attention associated yourself with a gentleman with an income of £2000 sterling who prophesies in Greek, in Latin, and in French, although he only knows English well, there

would be nothing to be said. So I beg you, sir, to enlighten me more on a matter so interesting and important. I am, etc.

REFUTATION OF SPINOZA, C. 1708.

[From the Latin.]

THE AUTHOR [WACHTER] passes on (ch. 4) to Spinoza, whom he compares with the cabalists. Spinoza (Eth. pt. 2, prop. 10, schol.) says: "Every one must admit that nothing is or can he conceived without God. For it is acknowledged by everyone that God is the sole cause of all things, of their essence as well as of their existence; that is, God is the cause of things, not only in respect to their being made (*secundum, fieri),* but also in respect to their being *(secundum esse).*" This, from Spinoza, the author [Wachter] appears to approve. And it is true that we must speak of created things only as permitted by the nature of God. But I do not think that Spinoza has succeeded in this. Essences can in a certain way be conceived of without God, but existences involve God. And the very reality of essences by which they exert an influence upon existences is from God. The essences of things are co-eternal with God. And the very essence of God embraces all other essences to such a degree that God cannot be perfectly conceived without them. But existence cannot be conceived of without God, who is the final reason of things.

This axiom, "To the essence of a thing belongs that without which it can neither be nor be conceived," is to be applied in necessary things or in species, but not in individuals or contingent things. For individuals cannot be distinctly conceived. Hence they have no necessary connection with God, but are produced freely. God has been inclined toward these by a determining reason, but he has not been necessitated.

Spinoza (de Emend. Intel. p. 374) places among fictions the dictum, "Something can be produced from nothing." But, in truth, modes which are

produced, are produced from nothing. Since there is no matter of modes, assuredly neither the mode, nor a part of it, has preëxisted, but only another mode which has disappeared and to which this present one has succeeded.

The cabalists seem to say that matter, on account of the vileness of its essence, can neither be created nor can it exist; hence, that there is absolutely no matter, or that spirit and matter, as Henry More maintains in his cabalistic theses, are one and the same thing. Spinoza, likewise, denies that God could have created any corporeal and material mass to be the subject of this world, "because," he says, "those who differ do not know by what divine power it could have been created." There is some truth in these words, but I think it is not sufficiently understood. Matter does, in reality, exist, but it is not a substance, since it is an aggregate or resultant of substances: I speak of matter as far as it is secondary or of extended mass, which is not at all a homogeneous body. But that which we conceive of as homogeneous and call primary matter is something incomplete, since it is merely potential. Substance, on the contrary, is something full and active.

Spinoza believed that matter, as commonly understood, did not exist. Hence he often warns us that matter is badly defined by Descartes as extension (Ep. 73), and extension is poorly explained as a very vile thing which must be divisible in place, "since (de Emend. Intel. p. 385) matter ought to be explained as an attribute expressing an eternal and infinite essence." I reply that extension, or if you prefer, primary matter, is nothing but a certain indefinite repetition of things as far as they are similar to each other or indiscernible. But just as number supposes numbered things, so extension supposes things which are repeated, and which have, in addition to common characteristics, others peculiar to themselves. These accidents, peculiar to each one, render the limits of size and shape, before only possible, actual. Merely passive matter is something very vile, that is,

wanting in all virtue, but such a thing consists only in the incomplete or in abstraction.

Spinoza (Eth. pt. 1, prop. 13, corol. and prop. 15, schol.) says: “No substance, not even corporeal substance, is divisible.” This statement is not surprising according to his system, since he admits but one substance; but it is equally true in mine, although I admit innumerable substances, for, in my system, all are indivisible or *monads.*

He says (Eth. pt. 3, prop. 2, schol.) that “the mind and the body are the same thing, only expressed in two ways,” and (Eth. pt. 2, prop. 7, schol.) that “thinking substance and extended substance are one and the same, known now under the attribute of thought, now under that of extension.” He says in the same scholitun, “This, certain Hebrews seem to have seen as through a cloud, who indeed maintain that God, the intellect of God, and the things known by it, are one and the same.” This is not my opinion. Mind and body are not the same any more than are the principle of action and that of passion. Corporeal substance has a soul and an organic body, that is, a mass made up of other substances. It is true that the same substance thinks and has an extended mass joined to it, but it does not consist of this mass, since all this can he taken away from it, without altering the substance; moreover, every substance perceives, but not every substance thinks. Thought indeed belongs to the monads, especially all perception, but extension belongs to compounds. It can no more be said that God and the things known by God are one and the same thing than that the mind and the things perceived by the mind are the same. The author [Wachter] believes that Spinoza posited a common nature in which the attributes thought and extension reside, and that this nature is spiritual; but there is no extension belonging to spirits unless the word he taken in a broader sense for a certain subtile animal such as angels were regarded by the ancients.. The author [Wachter] adds that mind and body are the modes of these attributes. But

how, I ask, can the mind be the mode of thought, when it is the principle of thought? Thus the mind should rather be the attribute and thought the modification of this attribute. It is astonishing also that Spinoza, as was seen above (de Emend. Intel. p. 385), seems to deny that extension is divisible into and composed of parts; which has no meaning, unless, perchance, like space, it is not a divisible thing. But space and time are orders of things and not things.

The author [Wachter] rightly says, that God found in himself the origins of all things, as I remember Julius Scaliger once said that "things are not produced by the passive power of matter but by the active power of God.". And I assert this of forms or of activities or entelechies.

What Spinoza (Eth. pt. 1, prop. 34) says, that "God is, by the same necessity, the cause of himself and the cause of all things," and (Polit. Tract. p. 270, c. 2, no. 2) that "the power of things is the power of God," I do not admit. God exists necessarily, but he produces things freely, and the power of things is produced by God but is different from the divine power, and things themselves operate, although they have received their power to act.

Spinoza (Ep. 21) says: "That everything is in God and moves in God, I assert with Paul and perhaps with all other philosophers, although in a different manner. I would even dare to say that this was the opinion of all the ancient Hebrews, so far as it can be conjectured from certain traditions, although these are in many ways corrupted." I think that everything is in God, not as the part in the whole, nor as an accident in a subject, but as place, yet a place spiritual and enduring and not one measured or divided, is in that which is placed, namely, just as God is immense or everywhere; the world is present to him. And it is thus that all things are in him; for he is where they are and where they are not, and he remains when they pass away and he has already been there where they come.

The author [Wachter] says that it is the concordant opinion of the cabalists that God produced certain things mediately and others immediately. Whence he next speaks of a certain created first principle which God made to proceed immediately from himself and by the mediation of which all other things have been produced in series and in order, and this they are wont to salute by various names: Adam Cadmon, Messiah, the Christ, *λογος;,* the word, the first-born, the first man, the celestial man, the guide, the shepherd, the mediator, etc. Elsewhere he gives a reason for this assertion. The fact itself is recognized by Spinoza, so that nothing is wanting except the name. “It follows,” he says (Eth. pt. 1, prop. 28, schol.), “in the second place, that God cannot properly be called the remote cause of individual things, except to distinguish these from those which God produces immediately or rather which follow from his absolute nature.” Moreover what those things are which are said to follow from the absolute nature of God, he explained (prop. 21) thus: “All things which follow from the absolute nature of any attribute of God must exist always and be infinite or are eternal and infinite through the same attribute.” — These propositions of Spinoza, which the author cites, are wholly without foundation. God produces no infinite creature, nor could it be shown or pointed out by any argument in what respect such a creature would differ from God.

The theory of Spinoza, namely, that from each attribute there springs a particular infinite thing, from extension a certain something infinite in extension, from thought a certain infinite understanding, arises from his varied imagination of certain heterogeneous divine attributes, like thought and extension, and perhaps innumerable others. For in reality extension is not an attribute of itself since it is only the repetition of perceptions. An infinitely ex, tended thing is only imaginary: an infinite thinking being is God himself. The things which are necessary and which proceed from the

infinite nature of God, are the eternal truths. A particular creature is produced by another, and this again by another. Thus, therefore, by no conception, could we reach God even if we should suppose a progress *ad infinitum,* and, notwithstanding, the last no less than the one which precedes is dependent upon God.

Tatian says, in his *Oration to the Greeks,* that there is a spirit dwelling in the stars, the angels, the plants, the waters and men, and that this spirit, although one and the same, contains differences in itself. But this doctrine I do not approve. It is the error of the world-soul universally diffused, and which, like the air in pneumatic organs, makes different sounds in different organs. Thus when a pipe is broken, the soul will desert it and will return into the world-soul. But we must know that there are as many incorporeal substances, or if you will, souls, as there are natural, organic machines.

But what Spinoza (Eth. pt. 2, prop. 13, schol.) says: "All things, although in different degrees, are animated," rests upon another strange doctrine, "for," he says, "of everything there is necessarily in God an idea, of which God is the cause, in the same way as there is an idea of the human body." But there is plainly no reason for saying that the soul is an idea. Ideas are something purely abstract, like numbers and figures, and cannot act. Ideas are abstract and numerical: the idea of each animal is a possibility, and it is an illusion to call souls immortal because ideas are eternal, as if the soul of a globe should be called eternal because the idea of a spherical body is eternal. The soul is not an idea, but the source of innumerable ideas, for it has, besides the present idea, something active, or the production of new ideas. But according to Spinoza, at any moment the soul will be different because the body being changed the idea of the body is different. Hence it is not strange if he considers creatures as transitory modifications. — The soul, therefore, is something vital or something containing active force.

Spinoza (Eth. pt. 1, prop. 16) says: “From the necessity of the divine nature must follow an infinite number of things in infinite modes, that is to say, all things which can fall under infinite intellect.” This is a most false opinion, and this error is the same as that which Descartes insinuated, viz. that matter successively assumes all forms. Spinoza begins where Descartes ended, in Naturalism. He is wrong also in saying (Ep. 58) that “the world is the effect of the divine nature,” although he almost adds that it was not made by chance. There is a mean between what is necessary and what is fortuitous, namely, what is free. The world is a voluntary effect of God, but on account of inclining or prevailing reasons. And even if the world should be supposed perpetual nevertheless it would not be necessary. God could either not have created it or have created it otherwise, but he was not to do it. Spinoza thinks (Ep. 49) that “God produces the world by that necessity by which he knows himself.” But it must be replied that things are possible in many ways, whereas it was altogether impossible that God should not know himself. — Spinoza says (Eth. pt. 1, prop. 17, schol.): “I know that there are many who believe that they can prove that sovereign intelligence and free will belong to the nature of God; for they say they know nothing more perfect to attribute to God than that which is the highest perfection in us..... Therefore, they prefer to assert that God is indifferent to all things, and that he creates nothing except what he has decided, by some absolute will, to create. But I think I have shown (Prop. 16) sufficiently clearly that all things follow from the sovereign power of God by the same necessity; in the same way as it follows from the nature of a triangle that its three angles are equal to two right angles.” — From the first words it is evident that Spinoza does not attribute to God intellect and will. He is right in denying that God is indifferent and that he decrees anything by absolute will: he decrees by a will which is based on reasons. That things proceed from God

as the properties of a triangle proceed from its nature is proved by no argument, besides there is no analogy between essences and existing things.

In the scholium of Proposition 17, Spinoza says that "the intellect and the will of God agree with ours only in name, because ours are posterior and God's are prior to things;" but it does not follow from this, that they agree only in name. Elsewhere, nevertheless, he says that "thought is an attribute of God, and that particular modes of thought must be referred to it (Eth. pt. 2, prop. 1)." But the author [Wachter] thinks that he is speaking there of the external word of God, because he says (Eth. pt. 5) "that our mind is a part of the infinite intellect."

"The human mind," says Spinoza (Eth. pt. 5, prop. 23, proof), "cannot he entirely destroyed with the body, but there remains something of it which is eternal. But this has no relation to time, for we attribute duration to the mind only during the duration of the body." In the scholium following, he adds, "This idea which expresses the essence of the body under the form of eternity [sub specie aeternitatis] is a certain mode of thought which belongs to the essence of the mind and which is necessarily eternal, etc." This is illusory. This idea is like the figure of the sphere, the eternity of which does not prejudge its existence, since it is but the possibility of an ideal sphere. Thus it is saying nothing to say that "our mind is eternal in so far as it expresses the body under the form of eternity," and it would be likewise eternal because it understands eternal truths as to the triangle. "Our soul has no duration nor does time relate to anything beyond the actual existence of the body." Thus Spinoza, l. c. who thinks that the mind perishes with the body because he believes that only a single body remains always, although this can be transformed.

The author [Wachter] adds: "I do not see that Spinoza has anywhere said positively that minds migrate from one body into another, and into different dwellings and various regions of eternity. Nevertheless it might be inferred

from his thought." But he errs. The same soul, to Spinoza, cannot be the idea of another body, as the figure of a sphere is not the figure of a cylinder. The soul, to Spinoza, is so fugitive, that it does not exist even in the present moment, and the body too only exists in idea. Spinoza says [Eth. pt. 5, prop. 2) that "memory and imagination disappear with the body." But I for my part think that some imagination and some memory always remain, and that, without them, there would be no soul. It must not be believed that the mind exists without feeling or without a soul. A reason without imagination and memory is a conclusion without' premises. Aristotle, also, thought that *vow,* mind, or the acting intellect remains, and not the soul. But the soul itself acts and the mind is passive.

Spinoza (de Emend. Intel. p. 384) says, "The ancients never, to my knowledge, conceived, as we do here, a soul acting according to certain laws and like a spiritual *automat*' (he meant to say *automaton).* The author [Wachter] interprets this passage of the soul alone and not of the mind, and says that the soul acts according to the laws of motion and according to external causes. Both are mistaken. I say that the soul acts spontaneously and yet like a spiritual automaton; and that this is true also of the mind. The soul is not less exempt than the mind from impulses from external things, and the soul no more than the mind acts determinately; as in bodies everything is done by motions according to the laws of force, so in the soul everything is done through effort or desire, according to the laws of the Good. The two realms are in harmony. It is true, nevertheless, that there are certain things in the soul which cannot be explained in an adequate manner except by external things, and so far the soul is subject to the external; but this is not by a physical influx, but so to speak by a moral, in so far, namely, as God, in creating the mind, had more regard to other things than to it itself. For in the creation and preservation of each thing he has regard to all other things.

Spinoza is wrong in calling [Eth. pt. 3, 9, schol.] the will the effort of each thing to persist in its being; for the will tends toward more particular ends and a more perfect mode of existence. He is wrong also in saying [pt. 3, prop. 7] that the effort is identical with the essence, whereas the essence is always the same and efforts vary. I do not admit that affirmation is the effort of the mind to persist in its being, that is, to preserve its ideas. We have this effort even when we affirm nothing. Moreover, with Spinoza, the mind is an idea, it does not have ideas. He is also wrong in thinking that affirmation or negation is volition, since, moreover, volition involves, in addition, the reason of the Good.

Spinoza (Ep. 2, ad Oldenb.) says that "the will differs from this or that volition, just as whiteness from this or that white color: consequently, will is not the cause of volition, as humanity is not the cause of Peter and of Paul. Particular volitions have therefore need of another cause. The will is only an entity of reason." So Spinoza. But we take the will for the power of choosing, the exercise of which is the volition. Therefore it is indeed by the will that we will; but it is true that there is need of other special causes to determine the will, namely, in order that it produce a certain volition. It must be modified in a certain manner. The will does not therefore stand to volitions as the species or the abstract of the species to individuals. Mistakes are not free nor acts of will, although often we concur in our errors by free actions.

Further, Spinoza says (Tract. Polit. c. 2, no. 6), "Men conceive themselves in nature as an empire within an empire (Malcuth in Malcuth, adds the author). For they think that the human mind is not the product of natural causes, but that it is immediately created by God so independent of other things that it has absolute power of determining itself and of using rightly its reason. But experience proves to us over-abundantly that it is no more in our power to have a sound mind than to have a sound body." So

Spinoza. In my opinion, each substance is an empire within an empire; but harmonizing exactly with all the rest it receives no influence from any being except it be from God, but, nevertheless, through God, its author, it depends upon all the others. It comes immediately from God and yet it is created conformed to the other things. For the rest, not all things are equally in our power. For we are inclined more to this or to that. Malcuth, or the realm of God, does not suppress either divine or human liberty, but only the indifference of equilibrium, as they say who think there are no reasons for those actions which they do not understand.

Spinoza thinks that the mind is greatly strengthened if it knows that what happens happens necessarily: but by this compulsion he does not render the heart of the sufferer content nor cause him to feel his malady the less. He is, on the contrary, happy if he understands that' good results from evil and that those things which happen are the best for us if we are wise.

From what precedes it is seen that what Spinoza says on the intellectual love of God (Eth. pt. 4, prop. 28) is only trappings for the people, since there is nothing loveable in a God who produces without choice and by necessity, without discrimination of good and evil. The true love of God is founded not in necessity but in 'goodness. Spinoza (de Emend. Intel. p. 388), says that "there is no science, but that we have only experience of particular things, that is, of things such that their existence has no connection with their essence, and which, consequently, are not eternal truths." — This contradicts what he said elsewhere, viz: that all things are necessary, that all things proceed necessarily from the divine essence. Likewise he combats (Eth. pt. 2, prop. 10, schol.) those who pretend that the nature of God belongs to the essence of created things, and yet he had established before [Eth. pt. 1, prop. 15] that things do not exist and cannot be conceived without God, and that they necessarily arise from him. He maintains (Eth. pt. 1, prop. 21), for this reason, that finite and temporal

things cannot be produced immediately by an infinite cause, but that (Prop. 28) they are produced by other causes, individual and finite. But how will they finally then spring from God? for they cannot come from him mediately in this case, since we could never reach in this way things which are not similarly produced by another finite thing. It cannot, therefore, be said that God acts by mediating second causes, unless he produces second causes. Therefore, it is rather to be said that God produces substances and not their actions, in which he only concurs.

REMARKS ON THE OPINION OF MALEBRANCHE THAT WE SEE ALL THINGS IN GOD, WITH REFERENCE TO LOCKE'S EXAMINATION OF IT. 1708.

[From the French.]

THERE IS, IN the posthumous works of Locke published at London in 1706, 8vo. an examination of the opinion of Malebranche that we see all things in God. It is acknowledged at the start that there are many nice thoughts and judicious reflections in the book on The Search after Truth, and that this made him hope to find therein something satisfactory on the nature of our ideas. But he has remarked at the beginning (§ 2) that this Father [Malebranche] makes use of what Locke calls the argumentum ad ignorantiam, in pretending to prove his opinion, because there is no other means of explaining the thing; but according to Mr. Locke, this argument loses its force when the feebleness of our understanding is considered. I am nevertheless of opinion that this argument is good if one can perfectly enumerate the means and exclude all but one. Even in Analysis, M. Frenicle employed this method of exclusion, as he called it. Nevertheless Locke is right in saying that it is of no use to say that this hypothesis is better than the other, if it is found not to explain what one would like to understand and even to involve things which cannot harmonize.

After having considered what is said in the first chapter of the second part of hook third, where Malebranche claims that what the soul can perceive must be in immediate contact with it, Mr. Locke asks (§ 3, 4.) what it is to be in *immediate contact,* this not appearing to him intelligible except in bodies. Perhaps it might be, replied that one acts immediately on the other. And as Malebranche, admitting that our bodies are united to our

souls, adds that it is not in such a way that the soul perceives it, he is asked (§ 5.) to explain that act of union or at least in what it differs from that which he does not admit? Father Malebranche will perhaps say that he does not know the union of the soul with the body except by faith, and that the nature of body consisting in extension alone, nothing can be deduced therefrom toward explaining the soul's action on the body. He grants an inexplicable union, but he demands one which shall serve to explain the commerce of the soul and body. He claims also to explain why material beings could not be united with the soul as is demanded; this is because these beings being extended and the soul not being so, there is no relation between them. But thereupon Locke asks very *apropos* (§ 7.) if there is any more relation between God and the soul. It seems indeed that the Reverend Father Malebranche ought to have urged not the little relation, but the little connection, which appears between the soul and the body, while between God and the creatures there is a connection such that they could not exist without him.

When the Father says (§ 6.) that there is no purely intelligible substance except God, I declare that I do not sufficiently understand him. There is something in the soul that we do not distinctly understand; and there are many things in God that we do not at all understand.

Mr. Locke (§ 8.) makes a remark on the end of the Father's chapter which is tantamount to my views; for in order to show that the Father has not excluded all the means of explaining the matter, he adds: "If I should say that it is possible that God has made our souls such and has so united them to bodies that at certain motions of the body the soul should have such and such perceptions but in a manner inconceivable to us, I should have said something as apparent and as instructive as that which he says." Mr. Locke in saying this seems to have had in mind my system of Pre-established Harmony, or something similar.

Mr. Locke objects (§ 20.) that the sun is useless if we see it in God. As this argument applies also against my system, which claims that we see the sun in us, I answer that the sun is not made solely for us and that God wishes to show us the truth as to what is without us.

He objects also (§22.) that he does not conceive how we could see something confusedly in God, where there is no confusion. One might answer that we see things confusedly when we see too many of them at a time.

Father Malebranche having said that God is the place of spirits as space is the place of bodies, Mr. Locke says (§ 25.) that he does not understand a word of this. But he understands at least what space, place and body are. He understands also that the Father draws an analogy between *space, place, body* and between *God, place, spirit.* Thus a good part of what he here says is intelligible. It may merely be objected that this analogy is not proven, although some relations are easily perceived which might give occasion for the comparison. I often observe that certain persons seek by this affectation of ignorance to elude what is said to them as if they understood nothing; they do this not to reproach themselves, but either to reproach those speaking, as if their jargon was unintelligible, or to exalt themselves above the matter and those who tell it, as if it was not worthy of their attention.

Nevertheless Mr. Locke is right in saying that the opinion of Father Malebranche is unintelligible in connection with his other opinions, since with him space and body are the same thing. The truth has escaped him here and he has conceived something common and immutable, to which bodies have an essential relation and which indeed produces their relation to one another. This order gives occasion for making a fiction and for conceiving space as an immutable substance; but what there is real in this notion relates to simple substances (under which spirits are included), and is found in God, who unites them.

The Father saying that ideas are representative beings, Mr. Locke asks (§ 26.) If these beings are substances, modes or relations? I believe that it may be said that they are nothing but relations resulting from the attributes of God.

When Mr. Locke declares (§31.) that he does not understand how the variety of ideas is compatible with the simplicity of God, it appears to me that he ought not raise an objection on this score against Father Malebranche, for there is no system which can make such a thing comprehensible. We cannot comprehend the incommensurable and a thousand other things, the truth of which we nevertheless know, and which we are right in employing to explain others which are dependent on them. There is something approaching to this in all simple substances; where there is variety of affections in unity of substance.

The Father maintains that the idea of the *infinite* is prior to that of the finite. Mr. Locke objects (§ 34.) that a child has the idea of a number or of a square sooner than that of the infinite. He is right in taking the ideas for images; but in taking them as the foundations of notions, he will find that in the *continuum* the notion of an extended, taken absolutely, is prior to the notion of an extended where the modification is added. This must he further applied to what is said in §§ 42. and 46.

The argument of the Father which Mr. Locke examines (§40.), that God alone, being the end of spirits, is also their sole object, is not to be despised. It is true that it needs something in order to be called a demonstration. There is a more conclusive reason which shows that God is the sole immediate external object of spirits, and that is that there is naught but he which can act on them.

It is objected (§ 41.) that the Apostle begins with the knowledge of the creatures in order to lead to God and that the Father does the contrary. I believe that these methods harmonize. The one proceeds *a priori,* the other

a posteriori; and the latter is the more common. It is true that the best way to know things is through their causes; but this is not the easiest. It requires too much attention to things of sense.

In replying to § 34. I have noticed the difference there is between image and idea. It seems that this difference is combated (§ 38.) by finding difficulty in the difference which there is between image *[sentiment]* and idea. But I think that the Father understands by image [*sentiment*] a perception of the imagination, whereas there may be ideas of things which are not sensible nor imageable. I affirm that we have as clear an idea of the color of the violet as of its figure (as is objected here) but not as distinct nor as intelligible.

Mr. Locke asks if an indivisible and unextended substance can have at the same time different modifications relating to inconsistent objects. I reply, Yes. That which is inconsistent in the same object is not inconsistent in the representation of different objects, conceived at the same time. It is not therefore necessary that there he different parts in the soul as it is not necessary that there be different parts in a point although different angles come together there.

It is asked with reason (§ 43.) how we know the creature if we do not see immediately aught but God? Because the objects, the representation of which God causes us to have, have something which resembles the idea we have of substance, and it is this which makes us judge that there are other substances.

It is supposed (§ 46.) that God has the idea of an angle which is the nearest to the right angle, but that he does not show it to anyone, however one may desire to have it. I reply that such an angle is a fiction, like the fraction nearest to unity, or the number nearest to zero, or the least of all numbers. The nature of continuity does not permit any such thing.

The Father had said that we know our soul by an inner feeling of consciousness, and that for this reason the knowledge of our soul is more imperfect than that of things, which we know in God. Mr. Locke then remarks very *apropos* (§ 47.) that the idea of our soul being in God as well as that of other things, we should see it also in God. The truth is that we see all things in ourselves and in our souls, and that the knowledge which we have of the soul is very true and just provided that we attend to it; that it is by the knowledge which we have of the soul that we know being, substance, God himself, and that it is by reflection on our thoughts that we know extension and bodies; that it is nevertheless true that God gives us all there is that is positive in this, and all perfection therein involved, by an immediate and continual emanation, by virtue of the dependence on him which all creatures have, and it is thus that a good meaning may be given to the phrase that God is the object of our souls and that we see all things in him.

Perhaps the design of the Father in the saying which is examined (§ 53.), that we see the essences of things in the perfections of God and that it is the universal reason which enlightens us, tends to show that the attributes of God are the bases of the simple notions which we have of things, — being, power, knowledge, diffusion, duration, taken absolutely, being in him and not being in creatures save in a limited way.

LETTER TO WAGNER ON THE ACTIVE FORCE OF BODY, ON THE SOUL AND ON THE SOUL OF BRUTES. 1710.

[From the Latin.]

1. I WILLINGLY reply to the inquiries you make as to the nature of the soul, for I see from the doubt which you present that my view is not sufficiently clear to you, and that this is due to some prejudgment drawn from my essay, inserted in the *Acta Eruditorum*, wherein I treated, in opposition to the illustrious Sturm, of the active force of body. You say that I have not there sufficiently vindicated active force for matter, and while I attribute resistance to matter I have also attributed reaction to the same, and consequently action; since therefore there is everywhere in matter an active principle, this principle seems to suffice for the actions of brutes, nor is there need in them of an incorruptible soul.

2. I reply, in the first place, that the active principle is not attributed by me to bare or primary matter, which is merely passive, and consists only in antitypia and extension; but to body or to clothed or secondary matter which in addition contains a primitive entelechy or active principle. I reply, secondly, that the resistance of bare matter is not action, but mere passion, inasmuch as it has antitypia or impenetrability, by which indeed it resists whatever would penetrate it but does not react, unless there be added an elastic force, which must be derived from motion, and therefore the active force of matter must be superadded. I reply, thirdly, that this active principle, this first entelechy, is, in fact, a vital principle, endowed also with the faculty of perception, and incorruptible, for reasons recently stated by me. And this is the very thing which in brutes I hold for their soul. While,

therefore, I admit active principles superadded everywhere in matter, I also posit, everywhere disseminated through it, vital or percipient principles, and thus monads, and, so to speak, metaphysical atoms wanting parts and incapable of being produced or destroyed naturally.

3. You next ask my definition of *soul.* I reply that soul may be employed in a broad and in a strict sense. Broadly speaking, soul will be the same as life or vital principle, that is, the principle of internal action existing in the simple thing or monad, to which external action corresponds. And this correspondence of internal and external, or representation of the external in the internal, of the composite in the simple, of multiplicity in unity, constitutes in reality perception. But in this sense, soul is attributed not only to animals but also to all other percipient beings. In the strict sense, soul is employed as a nobler species of life, or sentient life, where there is not only the faculty of perceiving, but in addition that of feeling, inasmuch, indeed, as attention and memory are joined to perception. Just as, in turn, mind is a nobler species of soul, that is, mind is rational soul, where reason or ratiocination from universality of truths is added to feeling. As therefore mind is rational soul, so soul is sentient life, and life is perceptive principle. I have shown, moreover, by examples and arguments, that not all perception is feeling, but that there is also insensible perception. For example, I could not perceive green unless I perceived blue and yellow, from which it results. At the same time, I do not feel blue and yellow unless perchance a microscope is employed.

4. You will remember, moreover, that according to my opinion, not only are all lives, all souls, all minds, all primitive entelechies, everlasting, but also that to each primitive entelechy or each vital principle there is perpetually united a certain natural machine, which comes to us under the name of organic body: which machine, moreover, even although it preserves its form in general, remains in flux, and is, like the ship of

Theseus, perpetually repaired. Nor therefore can we be certain that the smallest particle of matter received by us at birth, remains in our body, even although the same machine is by degrees completely transformed, augmented, diminished, involved or evolved. Hence, not only is the soul everlasting, but also some animal always remains, although no particular animal ought to be called everlasting, since the animal species does not remain; just as the caterpillar, and the butterfly are not the same animal, although the same soul is in both. Every natural machine, therefore, has this quality, that it is never completely destructible, since, however thick a covering may be dissolved, there always remains a little machine not yet destroyed, like the costume of Harlequin, in the comedy, to whom, after the removal of many tunics, there always remained a fresh one. And we ought to be the less astonished at this for this reason, that nature is everywhere organic and ordered by a most wise author for certain ends, and that nothing in nature ought to be criticized as unpolished, although it may sometimes appear to our senses as but a rude mass. Thus therefore we escape all the difficulties which arise from the nature of a soul absolutely separated from all matter; so that, in truth, a soul or an animal before birth or after death does not differ from a soul or an animal living the present life except in condition of things and degrees of perfections, but not by entire genus of being. And likewise I think that Genii are minds endowed with bodies very penetrating and suitable for action, which perhaps they are able to change at will, whence they do not deserve to be called even animals. Thus all things in nature are analogous, and the subtile may be understood from the coarse, since both are constituted in the same way. God alone is substance really separated from matter, since he is *actus purus*, endowed with no passive power, which, wherever it is, constitutes matter. And, indeed, all created substances have antitypia, by which it happens naturally that one is outside the other, and so penetration is excluded.

5. But although my principles are very general and hold not less in man than in brutes, yet man stands out marvellously above brutes and approaches the Genii, because from the use of reason he is capable of society with God, and thus of reward and of punishment in the divine government. And therefore he preserves not only life and soul like the brutes, but also self-consciousness and memory of a former state, and, in a word, personality. He is immortal, not only physically but also morally, whence in the strict sense immortality is attributed only to the human soul. For if a man did not know that in the other life rewards or punishments would be awarded him for this life, there would really be no punishment, no reward, and as regards morals, it would be just as if I were extinguished and another, happier or unhappier, should succeed me. And thus I hold that souls, latent doubtless in seminal animalcules from the beginning of things, are not rational until, by conception, they are destined for human life; but when they are once made rational and rendered capable of consciousness and of society with God, I think that they never lay aside the character of citizens in the Republic of God; and since it is most justly and beautifully governed, it is a consequence that by the very laws of nature, on account of the parallelism of the kingdom of grace and of nature, souls by the force of their own actions are rendered more fit for rewards and punishments. And in this sense it may be said that virtue brings its own reward and sin its own punishment, since by a certain natural consequence, before the last state of the soul, according as it departs atoned for or unatoned for, there arises a certain natural divergence, preordained by God in nature and with divine promises and threats, and consistent with grace and justice; the intervention also being added of Genii, good or bad according as we have associated with either, whose operations are certainly natural although their nature is sublimer than ours. “We see, indeed, that a man awaking from a profound sleep, or even recovering from apoplexy, is wont to recover the memory of

his former state. The same must be said of death, which can render our perceptions turbid and confused but cannot entirely blot them from memory, the use of which returning, rewards and punishments take place. Thus the Saviour compared death to sleep. Moreover the preservation of personality and of moral immortality cannot be attributed to brutes incapable of the divine society and law.

6. No one, therefore, need fear dangerous consequences from this doctrine, since rather a true natural theology, not only not at variance with revealed truth but even wonderfully favorable to it, may be demonstrated by most beautiful reasoning from my principles. Those indeed who deny souls to brutes and all perception and organism to other parts of matter, do not sufficiently recognize the Divine Majesty, and introduce something unworthy of God, unpolished, that is, a void of perfections or forms, which you may call a metaphysical void, which is no less to be rejected than a material or physical void. But those who grant true soul and perception to brutes and yet affirm that their souls can perish naturally, take away thus from us the demonstration which shows that our minds cannot perish naturally, and fall into the dogma of the Socinians, who think that souls are preserved only miraculously or by grace, but believe that by nature they ought to perish; which is to rob natural theology of its largest part. Besides, the contrary can be completely demonstrated, since a substance wanting parts cannot naturally be destroyed.

Wolfenbuttel, June 4, 1710.

THE THEODICY.

ABRIDGMENT OF THE ARGUMENT REDUCED TO SYLLOGISTIC FORM.

1710.

[From the French.]

SOME intelligent persons have desired that this supplement should he made [to the Theodicy], and I have the more readily yielded to their wishes as in this way I have an opportunity to again remove certain difficulties and to make some observations which were not sufficiently emphasized in the work itself.

I. *Objection.* Whoever does not choose the best is lacking in power, or in knowledge, or in goodness.

God did not choose the best in creating this world.

Therefore God has been lacking in power, or in knowledge, or in goodness.

Answer. I deny the minor, that is, the second premise of this syllogism; and our opponent proves it by this *Prosyllogism.* Whoever makes things in which there is evil, which could have been made without any evil, or the making of which could have been omitted, does not choose the best.

God has made a world in which there is evil; a world, I say, which could have been made without any evil, or the making of which could have been omitted altogether.

Therefore God has not chosen the best.

Answer. I grant the minor of this prosyllogism; for it must be confessed that there is evil in the world which God has made, and that it was possible to make a world without evil, or even not to create a world at all, for its creation depended on the free will of God; but I deny the major, that is, the first of the two premises of the prosyllogism, and I might content myself with simply demanding its proof; but in order to make the matter clearer, I have wished to justify this denial by showing that the best plan is not always that which seeks to avoid evil, since it may happen that the evil he accompanied by a greater good. For example, a general of an army will prefer a great victory with a slight wound to a condition without wound and without victory. We have proved this more fully in the large work by making it clear, by instances taken from mathematics and elsewhere, that an imperfection in the part may be required for a greater perfection in the whole. In this I have followed the opinion of St. Augustine, who has said a hundred times, that God permitted evil in order to bring about good, that is, a greater good; and that of Thomas Aquinas (in libr. II. sent. dist. 32, qu. I, art. 1), that the permitting of evil tends to the good of the universe. I have shown that the ancients called Adam's fall felix culpa, a happy sin, because it had been retrieved with immense advantage by the incarnation of the Son of God, who has given to the universe something nobler than anything that ever would have been among creatures except for this. And in order to a clearer understanding. I have added, following many good authors, that it was in accordance with order and the general good that God gave to certain creatures the opportunity of exercising their liberty, even when he foresaw that they would turn to evil, but which he could so well rectify; because it was not right that, in order to hinder sin, God should always act in an extraordinary manner.

To overthrow this objection, therefore, it is sufficient to show that a world with evil might be better than a world without evil; but I have gone

even farther in the work, and have even proved that this universe must be in reality better than every other possible universe.

II. *Objection.* If there is more evil than good in intelligent creatures, then there is more evil than good in the whole work of God.

Now, there is more evil than good in intelligent creatures.

Therefore there is more evil than good in the whole work of God.

Answer. I deny the major and the minor of this conditional syllogism. As to the major, I do not admit it at all, because this pretended deduction from a part to the whole, from intelligent creatures to all creatures, supposes tacitly and without proof that creatures destitute of reason cannot enter into comparison nor into account with those which possess it. But why may it not be that the surplus of good in the non-intelligent creatures which fill the world, compensates for, and even incomparably surpasses, the surplus of evil in the rational creatures? It is true that the value of the latter is greater; but, in compensation, the other are beyond comparison the more numerous, and it may be that the proportion of number and of quantity surpasses that of value and of quality.

As to the minor, that is no more to be admitted; that is, it is not at all to be admitted that there is more evil than good in the intelligent creatures. There is no need even of granting that there is more evil than good in the human race, because it is possible, and in fact very probable, that the glory and the perfection of the blessed are incomparably greater than the misery and the imperfection of the damned, and that here the excellence of the total good in the smaller number exceeds the total evil in the greater number. The blessed approach the Divinity, by means of the Divine Mediator, as near as may suit these creatures, and make such progress in good as is impossible for the damned to make in evil, approach as nearly as they may to the nature of demons. God is infinite, and the devil is limited; good may and does advance *ad infinitum,* while evil has its bounds. It is therefore possible, and

is credible, that in the comparison of the blessed and the damned, the contrary of that which I have said might happen in the comparison of intelligent and non-intelligent creatures, takes place; namely, it is possible that in the comparison of the happy and the unhappy, the proportion of degree exceeds that of number, and that in the comparison of intelligent and non-intelligent creatures, the proportion of number is greater than that of value. I have the right to suppose that a thing is possible so long as its impossibility is not proved; and Indeed that which I have here advanced is more than a supposition.

But in the second place, if I should admit that there is more evil than good in the human race, I have still good grounds for not admitting that there is more evil than good in all intelligent creatures. For there is an inconceivable number of genii, and perhaps of other rational creatures. And an opponent could not prove that in all the City of God, composed as well of genii as of rational animals without number and of an infinity of kinds, evil exceeds good. And although in order to answer an objection, there is no need of proving that a thing is, when its mere possibility suffices; yet, in this work, I have not omitted to show that it is a consequence of the supreme perfection of the Sovereign of the universe, that the kingdom of God be the most perfect of all possible states or governments, and that consequently the little evil there is, is required for the consummation of the immense good which is there found.

III. *Objection.* If it is always impossible not to sin, it is always unjust to punish.

How, it is always impossible not to sin; or, in other words, every sin is necessary.

Therefore, it is always unjust to punish.

The minor of this is proved thus:

1. *Prosyllogism.* All that is predetermined is necessary. Every event (and consequently sin also) is necessary.

Again this second minor is proved thus:

2. *Prosyllogism.* That which is future, that which is foreseen, that which is involved in the causes, is predetermined.

Every event is such.

Therefore, every event is predetermined.

Answer. I admit in a certain sense the conclusion of the second prosyllogism, which is the minor of the first; but I shall deny the major of the first prosyllogism, namely, that every thing predetermined is necessary; understanding by the necessity of sinning, for example, or by the impossibility of not sinning, or of not performing any action, the necessity with which we are here concerned, that is, that which is essential and absolute, and which destroys the morality of an action and the justice of punishments. For if anyone understood another necessity or impossibility, namely, a necessity which should be only moral, or which was only hypothetical (as will be explained shortly); it is clear that I should deny the major of the objection itself. I might content myself with this answer and demand the proof of the proposition denied; but I have again desired to explain my procedure in this work, in order to better elucidate the matter and to throw more light on the whole subject, by explaining the necessity which ought to be rejected and the determination which must take place. That necessity which is contrary to morality and which ought to be rejected, and which would render punishment unjust, is an insurmountable necessity which would make all opposition useless, even if we should wish with all our heart to avoid the necessary action, and should make all possible efforts to that end. Now, it is manifest that this is not applicable to voluntary actions, because we would not perform them if we did not choose to. Also their prevision and predetermination is not absolute, but it supposes the

will: if it is certain that we shall perform them, it is not less certain that we shall choose to perform them. These voluntary actions and their consequences will not take place no matter what we do or whether we wish them or not; but, *through* that which we shall do and through that which we shall wish to do, which leads to them. And this is involved in prevision and in predetermination, and even constitutes their ground. And the necessity of such an event is called conditional or hypothetical, or the necessity of consequence, because it supposes the will, and the other *requisites*; whereas the necessity which destroys morality and renders punishment unjust and reward useless, exists in things which will be whatever we may do or whatever we may wish to do, and, in a word, is in that which is essential; and this is what is called an absolute necessity. Thus it is to no purpose, as regards what is absolutely necessary, to make prohibitions or commands, to propose penalties or prizes, to praise or to blame; it will be none the less. On the other hand, in voluntary actions and in that which depends upon them, precepts armed with power to punish and to recompense are very often of use and are included in the order of causes which make an action exist. And it is for this reason that not only cares and labors but also prayers are useful; God having had these prayers in view before he regulated things and having had that consideration for them which was proper. This is why the precept which says *ora et labora* (pray and work), holds altogether good; and not only those who (under the vain pretext of the necessity of events) pretend that the care which business demands may be neglected, but also those who reason against prayer, fall into what the ancients even then called the *lazy sophism.* Thus the predetermination of events by causes is just what contributes to morality instead of destroying it, and causes incline the will, without compelling it. This is why the *determination* in question is not a necessitation — it is certain (to him who knows all) that the effect will follow this inclination; but this effect does not follow by a necessary

consequence, that is, one the contrary of which implies contradiction. It is also by an internal inclination such as this that the will is determined, without there being any necessity. Suppose that one has the greatest passion in the world (a great thirst, for example), you will admit to me that the soul can find some reason for resisting it, if it were only that of showing its power. Thus, although one may never be in a perfect indifference of equilibrium and there may be always a preponderance of inclination for the side taken, it, nevertheless, never renders the resolution taken absolutely necessary.

IV. *Objection.* Whoever can prevent the sin of another and does not do so, but rather contributes to it although he is well informed of it, is accessory to it.

God can prevent the sin of intelligent creatures; but he does not do so, and rather contributes to it by his concurrence and by the opportunities which he brings about, although he has a perfect knowledge of it.

Hence, etc.

Answer. I deny the major of this syllogism. For it is possible that one could prevent sin, but ought not, because he could not do it without himself committing a sin, or (when God is in question) without performing an unreasonable action. Examples have been given and the application to God himself has been made. It is possible also that we contribute to evil and that sometimes we even open the road to it, in doing things which we are obliged to do; and, when we do our duty or (in speaking of God) when, after thorough consideration, we do that which reason demands, we are not responsible for the results, even when we foresee them. We do not desire these evils; but we are willing to permit them for the sake of a greater good which we cannot reasonably help preferring to other considerations, and it is a consequent will, which results from antecedent wills, by which we will the good. I know that some persons, in speaking of the antecedent and

consequent will of God, have understood by the antecedent that which wills that all men should be saved; and by the consequent, that which wills, in consequence of persistent sin, that they should be damned. But these are merely illustrations of a more general idea, and it may be said for the same reason that God, by his antecedent will, wills that men should not sin; and by his consequent or final and decreeing will (that which is always followed by its effect), he wills to permit them to sin, this permission being the result of superior reasons. And we have the right to say in general that the antecedent will of God tends to the production of good and the prevention of evil, each taken in itself and as if alone (particulariter et secundum quid, Thom. I, qu. 19, art. 6), according to the measure of the degree of each good and of each evil; but that the divine consequent or final or total will tends toward the production of as many goods as may be put together, the combination of which becomes in this way determined, and includes also the permission of some evils and the exclusion of some goods, as the best possible plan for the universe demands. Arminius, in his *Anti-perkinsus*, has very well explained that the will of God may be called consequent, not only in relation to the action of the creatures considered beforehand in the divine understanding, but also in relation to other anterior acts of will. But this consideration of the passage cited from Thomas Aquinas, and that from Scotus (I. dist. 46, qu. XI), is enough to show that they make this distinction as I have done here. Nevertheless, if anyone objects to this use of terms let him substitute *deliberating* will, in place of antecedent, and *final* or decreeing will, in place of consequent. For I do not wish to dispute over words.

V. *Objection.* Whatever produces all that is real in a thing, is its cause.

God produces all that is real in sin. Hence, God is the cause of sin.

Answer. I might content myself with denying the major or the minor, since the term real admits of interpretations which would render these

premises false. But in order to explain more clearly, I will make a distinction. Real signifies either that which is positive only, or, it includes also privative beings: in the first case, I deny the major and admit the minor; in the second case, I do the contrary. I might have limited myself to this, but I have chosen to proceed still farther and give the reason for this distinction. I have been very glad therefore to draw attention to the fact that every reality purely positive or absolute is a perfection; and that imperfection comes from limitation, that is, from the privative: for to limit is to refuse progress, or the greatest possible progress. Now God is the cause of all perfections and consequently of all realities considered as purely positive. But limitations or privations result from the imperfection of creatures, limiting their receptivity. And it is with them as with a loaded vessel which the river causes to move more or less slowly according to the weight winch it carries: thus' its speed depends upon the river, but the retardation which limits this speed comes from the load. Thus in the Theodicy, we have shown how the creature, in causing sin, is a defective cause; how errors and evil inclinations are born of privation; and how privation is accidentally efficient; and I have justified the opinion of St. Augustine (lib. I. ad Simpl. qu. 2) who explains, for example, how God makes the soul obdurate, not by giving it something evil, but because the effect of his good impression is limited by the soul's resistance and by the circumstances which contribute to this resistance, so that he does not give it all the good which would overcome its evil. *Nec, inquuit*, *ab illo erogatur aliquid quo homo fit deterior, sed tantum quo fit melior non erogatur.* But if God had wished to do more, he would have had to make either other natures for creatures, or other miracles to change their natures, things which the best plan could not admit. It is as if the current of the river must be more rapid than its fall admitted or that the boats should be loaded more lightly, if it were necessary to make them move more quickly. And the original

limitation or imperfection of creatures requires that even the best plan of the universe could not be exempt from certain evils, but only those moreover, which are to result in a greater good. There are certain disorders in the parts which marvellously enhance the beauty of the whole; just as certain dissonances, when properly used, render the harmony more beautiful. But this depends on what has already been said in answer to the first objection.

VI. *Objection.* He who punishes those who have done as well as it was in their power to do, is unjust.

God does so.

Hence, etc.

Answer. I deny the minor of this argument and I believe that God always gives sufficient aid and grace to those who have a good will, that is, to those who do not reject this grace by new sin. Thus I do not admit the damnation of infants who have died without baptism or outside of the church; nor the damnation of adults who have acted according to the light which God has given them. And I believe that if *any one has followed the bight which has been given him*, he will undoubtedly receive greater light when he has need of it, as the late M. Hulseman, a profound and celebrated theologian at Leipsic, has somewhere remarked; and if such a man has failed to receive it during his life time he will at least receive it when at the point of death.

VII. *Objection.* He who gives only to some, and not to all, the means which produce in them effectively a good will and salutary final faith, has not sufficient goodness.

God does this.

Hence, etc.

Answer. I deny the major of this. It is true that God could overcome the greatest resistance of the human heart and does it, too, sometimes, he it by internal grace, be it by external circumstances which have a great effect on souls; but he does not always do this. Whence comes this distinction? it

may be asked, and why does his goodness seem limited? It is because, as I have already said in answering the first objection, it would not have been in order always to act in an extraordinary manner, and to reverse the connection of things. The reasons of this connection, by means of which one is placed in more favorable circumstances than another, are hidden in the depths of the wisdom of God; they depend upon the universal harmony. The best plan of the universe, which God could not fail to choose, made it so. We judge from the event itself, since God has made it, that it was not possible to do better. Far from being true that this conduct is contrary to goodness, it is supreme goodness which led him to it. This objection with its solution might have been drawn from what was said in regard to the first objection; but it seemed useful to touch upon it separately.

VIII. *Objection.* He who cannot fail to choose the best, is not free.

God cannot fail to choose the best.

Hence, God is not free.

Answer. I deny the major of this argument; it is rather true liberty and the most perfect, to be able to use one's free will for the best, and to always exercise this power without ever being turned from it either by external force or by internal passions, the first of which causes slavery of the body, the second, slavery of the soul. There is nothing less servile than to be always led toward the good, and always by one's own inclination, without any constraint and without any displeasure. And to object therefore that God had need of external things, is only a sophism. He created them freely; but having proposed to himself an end, which is to exercise his goodness, wisdom determined him to choose those means best fitted to attain this end. To call this a *need* is to take that term in an unusual sense which frees it from all imperfection, just as when we speak of the wrath of God.

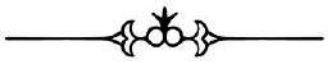
Seneca has somewhere said that God commanded but once but that he obeys always, because he obeys laws which he willed to prescribe to

himself; *semel jussit, semper paret.* But he had better have said that God always commands and that he is always obeyed; for in willing, he always follows the inclination of his own nature, and all other things always follow his will. And as this will is always the same, it cannot be said that he obeys only that will which he formerly had. Nevertheless, although his will is always infallible and always tends toward the best, the evil, or the lesser good, which he rejects, does not cease to be possible in itself; otherwise the necessity of the good would be geometrical (so to speak), or metaphysical and altogether absolute; the contingency of things would be destroyed, and there would be no choice. But this sort of necessity, which does not destroy the possibility of the contrary, has this name only by analogy; it becomes effective, not by the pure essence of things, but by that which is outside of them, above them, — namely, by the will of God. This necessity is called moral, because, to the sage, *necessity* and *what ought to be* are equivalent things; and when it always has its effect, as it really has in the perfect sage, that is, in God, it may be said that it is a happy necessity. The nearer creatures approach to it, the nearer they approach to perfect happiness. Also this kind of necessity is not that which we try to avoid and which destroys morality, rewards and praise. For that which it brings, does not happen whatever we may do or will, but because we will it well. And a will to which it is natural to choose well, merits praise so much the more; also it carries its reward with it, which is sovereign happiness. And as this constitution of the divine nature gives entire satisfaction to him who possesses it, it is also the best and the most desirable for the creatures who are all dependent on God. If the will of God did not have for a rule the principle of the best, it would either tend toward evil, which would be the worst; or it would be in some way indifferent to good and to evil, and would be guided by chance: but a will which would allow itself always to act by chance, would not be worth more for the government of the universe than

the fortuitous concourse of atoms, without there being any divinity therein. And even if God should abandon himself to chance only in some cases and in a certain way (as he would do, if he did not always work towards the best and if he were capable of preferring a lesser good to a greater, that is, an evil to a good, since that which prevents a greater good is an evil), he would be imperfect, as well as the object of his choice; he would not merit entire confidence; he would act without reason in such a case, and the government of the universe would be like certain games, equally divided between reason and chance. All this proves that this objection which is made against the choice of the best, perverts the notions of the free and of the necessary, and represents to us even the best as evil; to do which is either malicious or ridiculous.

ON WISDOM — THE ART OF REASONING WELL, THE ART OF DISCOVERY, THE ART OF REMEMBERING.

[From the French.]



WISDOM IS A perfect knowledge of the principles of all the sciences and of the art of applying them. I call *principles* all the fundamental truths which suffice for drawing thence all conclusions in case of need, after some exercise and with some little application. In a word, that which serves to lead the mind to regulate the manners, to subsist honestly, and everywhere, even if one were amid barbarians, to preserve the health, to perfect one's self in every kind of thing of which one may have need, and to provide, finally, the conveniences of life. The art of applying these principles to exigencies, embraces the art of judging well or reasoning, the art of discovering unknown truths, and finally, of remembering what one knows, in the nick of time and when one has need of it.

THE ART OF REASONING WELL consists in the following maxims:

1. Nothing is ever to be recognized as true but what is so manifest that no ground for doubt can he found. This is why it will be well, in beginning one's investigations, to imagine one's self interested in sustaining the contrary, in order to see if this incitement could not arouse one to find that the matter has something solid to be said in its favor. For prejudices must be avoided and nothing he ascribed to things but what they include. But also one must never be opinionated.

2. When there appears to be no means of attaining this assurance, we must, in waiting for greater fight, content ourselves with probability. But we must distinguish the degrees of probability and we must remember that all that we infer from a principle which is but probable must hear the marks of

the imperfection of its source, especially when several probabilities must he supposed in order to reach this conclusion, for it thereby becomes still less certain than was each probability which serves it as basis.

3. To infer one truth from another, a certain connection, which shall be without interruption, must he observed. For as one may feel sure that a chain will hold when he is assured that each separate link is of good material and that it clasps the two neighboring links, viz: the one preceding and the one following it, so we may he sure of the accuracy of the reasoning when the matter is good, that is to say, when nothing doubtful enters into it, and when the form consists in a perpetual concatenation of truths which allows of no gap. For example, A is B and B is C and C is D, hence A is D. This concatenation will always teach us never to put in the conclusion more than there was in the premises.

THE ART OF DISCOVERY consists in the following maxims:

1. In order to know a thing we must consider all the requisites of that thing, that is to say, all that which suffices to distinguish it from every other thing. This is what is called definition, nature, reciprocal property.

2. Having once found a means of distinguishing it from every other thing, this same first rule must be applied to the consideration of each condition or requisite which enters into this means, and all the requisites of each requisite must be considered. And this is what I call true *analysis* or distribution of the difficulty into several parts.

3. When we have pushed the analysis to the end, that is to say, when we have considered the requisites which enter into the consideration of the thing proposed and even the requisites of the requisites, and when we have finally come to the consideration of some natures which are understood only through themselves, which are without requisites and which need nothing outside of themselves in order to be conceived, we have reached a perfect knowledge of the thing proposed.

4. When the thing deserves it, we must try to have this perfect knowledge present in the mind all at once, and this is done by repeating the analysis several times until it seems to us that we see the whole of it at a single glance of the mind. And for this result a certain gradation in repetition must be observed.

5. The mark of perfect knowledge is when nothing presents itself in the thing in question for which we cannot account and when there is no conjuncture the outcome of which we cannot predict beforehand. It is very difficult to carry through an analysis of things, but it is not so difficult to complete the analysis of truths of which we have need. Because the analysis of a truth is completed when its demonstration has been found, and it is not always necessary to complete the analysis of the subject or predicate in order to find the demonstration of a proposition. Most often the beginning of the analysis of a thing suffices for the analysis or perfect knowledge of the truth which we know of the thing.

6. We must always begin our investigations with the easiest thing, such as the most general and the simplest, likewise those on which it is easy to make experiments and to find their reason, such as numbers, lines, motions.

7. We must proceed in order, and from easy things to those which are difficult, and we must try to discover some progression in the order of our meditations, so that we may have nature itself as our guide and voucher.

8. We must try to omit nothing in all our distributions or enumerations. For this, dichotomies by opposite members are very useful.

9. The first of several analyses of different particular matters will be the catalogue of simple thoughts, or those which are not far removed from simple.

10. Having the catalogue of simple thoughts we shall be in position to recommence *a priori* and to explain the origin of things, beginning at their source, in a perfect order and in a combination or synthesis absolutely

complete. And this is all that our mind can do in the state in which it is at present.

THE ART OF REMEMBERING in the nick of time and when it is needed what one knows, consists in the following observations:

1. We must accustom ourselves to be present-minded, that is to say, to be able to meditate just as well in a tumult, on occasion, and in danger, as in our cabinet. This is why we must test ourselves on occasions and even seek them; with this precaution, however, that we do not expose ourselves without good reason to irreparable evil. In the meanwhile it is good to exercise ourselves on occasions when the danger is imaginary or small, as in our sport, conversations, conferences, exercises, and comedies.

2. We must accustom ourselves to enumerations. This is why it is well to exercise ourselves in collecting all possible cases of the matter in question, all the species of a genus, all the conveniences or inconveniences of a means, all possible ways of aiming at some end.

3. We must accustom ourselves to distinctions; namely, two or more very similar things being given, to find on the spot all their differences.

4. We must accustom ourselves to analogies; namely, two or more very different things being given to find their resemblances.

5. We must be able to adduce on the spot things which closely resemble the given thing or which are very different from it. For example, when one denies some general maxim, it is well if I can adduce on the spot some examples. And when another quotes some maxim against me, it is well if I can forthwith oppose an instance to him. When one tells me a story, it is well if I can adduce then and there a similar one.

6. When there are truths or knowledges in which the natural connection of the subject with its predicate is not known to us, as happens in matters of fact and in truths of experience, in order to retain them we must make use of certain artifices, as for example, for the specific properties of simple,

natural, civil and ecclesiastical history, geography, customs, laws, canons, languages. I see nothing so fitted to make us retain these things as burlesque verses and sometimes certain figures; also hypotheses invented to explain them in imitation of natural things (as an appropriate etymology, true or false, for languages — Régula mundi, in imagining certain orders of providence for history).

7. Finally, it is well to make an *inventory* in writing of the knowledges which are the most useful, with a register or alphabetical table. And finally a portable man*ual* must be drawn therefrom of what is most necessary and most ordinary.

THE PRINCIPLES OF NATURE AND OF GRACE. 1714.

[From the French.]

1. *Substance* is being, capable of action. It is simple or compound. *Simple substance* is that which has no parts. *Compound* substance is a collection of simple substances or *monads. Monas* is a Greek word which signifies unity, or that which is one.

Compounds, or bodies, are multitudes; and simple substances, lives, souls, spirits are unities. And there must be simple substances everywhere, because without simple substances there would be no compounds; and consequently all nature is full of life.

2. Monads, having no parts, cannot be formed or decomposed. They cannot begin or end naturally; and consequently last as long as the universe, which will indeed be changed but will not be destroyed. They cannot have shapes; otherwise they would have parts. And consequently a monad, in itself and at a given moment, could not be distinguished from another except by its internal qualities and actions, which can be nothing else than its *perceptions* (that is, representations of the compound, or of what is external, in the simple), and its *appetitions* (that is, its tendencies from one perception to another), which are the principles of change. For the simplicity of substance does not prevent multiplicity of modifications, which must be found together in this same simple substance, and must consist in the variety of relations to things which are external. Just as in a centre or point, altogether simple as it is, there is found an infinity of angles formed by lines which there meet.

3. Everything in nature is full. There are everywhere simple substances, separated in reality from each other by activities of their own which

continually change their relations; and each simple substance, or monad, which forms the centre of a compound substance (as, for example, of an animal) and the principle of its unity, is surrounded by a mass composed of an infinity of other monads, which constitute the body proper of this central monad; and in accordance with the affections of this it represents, as a *centre,* the things which are outside of itself. And this *body* is *organic,* when it forms a sort of automaton or natural machine: which is a machine not only in its entirety, but also in its smallest perceptible parts. And as, because of the plenitude of the world, everything is connected and each body acts upon every other body, more or less according to the distance, and by reaction is itself affected thereby; it follows that each monad is a mirror, living or endowed with internal activity, representative according to its point of view of the universe, and as regulated as the universe itself. And perceptions in the monad spring one from the other, by the law of appetites or by the *final causes of good and evil,* which consist in visible, regulated or unregulated perceptions; just as the changes of bodies and external phenomena spring one from another, by the laws of *efficient causes,* that is, of movements. Thus there is perfect *harmony* between the perceptions of the monad and the movements of bodies, established at the beginning between the system of efficient causes and that of final causes. And in this consists the accord and physical union of the soul and body, although neither one can change the laws of the other.

4. Each monad, with a particular body, makes a living substance. Thus there is not only life everywhere, provided with members or organs, but also there is an infinity of degrees in monads, some dominating more or less over the others. But when the monad has organs so adjusted that by means of them there is clearness and distinctness in the impressions which it receives and consequently in the perceptions which represent them (as, for example, when by means of the shape of the humors of the eyes, the rays of

light are concentrated and act with more force); this can extend even to *feeling [sentiment],* that is, even to a perception accompanied by *memory,* that is, one a certain echo of which remains a long time to make itself heard upon occasion; and such a living being is called an *animal,* as its monad is called a soul. And when this soul is elevated to *reason* it is something more sublime and is reckoned among spirits, as will soon be explained.

It is true that animals are sometimes in the condition of simple living beings, and their souls in the condition of simple monads, namely, when their perceptions are not sufficiently distinct to be remembered, as happens in a profound, dreamless sleep, or in a swoon. But perceptions which have become entirely confused must be re-developed in animals, for reasons which I shall shortly (§ 12) enumerate. Therefore it is well to make a distinction between the *perception,* which is the internal condition of the monad representing external things, and *apperception,* which is *consciousness* or the reflective knowledge of this internal state; the latter not being given to all souls, nor at all times to the same soul. And it is for want of this distinction that the Cartesians have failed, taking no account of the perceptions of which we are not conscious as people take no account of imperceptible bodies. It is this also which made the same Cartesians believe that only spirits are monads, that there is no soul of brutes, and still less other *principles of life.*

And as they shocked too much the common opinion of men by refusing feeling to brutes, they have, on the other hand, accommodated themselves too much to the prejudices of the multitude, by confounding a *long swoon,* caused by a great confusion of perceptions, with *death strictly speaking,* where all perception would cease. This confirmed the ill-founded belief in the destruction of some souls, and the bad opinion of some so-called strong minds, who have contended against the immortality of our soul.

5. There is a continuity in the perceptions of animals which bears some resemblance to reason; but it is only founded in the memory of *facts,* and not at all in the knowledge of *causes.* Thus a dog shuns the stick with which it has been beaten, because memory represents to it the pain which the stick has caused it. And men in so far as they are empirics, that is to say, in three-fourths of their actions, act simply as brutes. For example, we expect that there will be daylight to-morrow, because we have always had the experience; only an astronomer foresees it by reason, and even this prediction will finally fail when the cause of day, which is not eternal, shall cease. But *true reasoning* depends upon necessary or eternal truths, such as those of logic, numbers, geometry, which establish an indubitable connection of ideas and unfailing consequences. The animals in which these consequences are not noticed, are called *brutes;* but those which know these necessary truths are properly those which are called *rational animals,* and their souls are called *spirits.* These souls are capable of performing acts of reflection, and of considering that which is called the *ego, substance, monad, soul, spirit,* in a word, immaterial things and truths. It is this which renders us capable of the sciences and of demonstrative knowledge.

6. Modem researches have taught us, and reason approves of it, that living beings whose organs are known to us, that is to say, plants and animals, do not come from putrefaction or from chaos, as the ancients believed, but from *pre-formed* seeds, and consequently by the transformation of pre-existing living beings. There are animalcules in the seeds of large animals, which by means of conception assume a new dress which they make their own and by means of which they can nourish themselves and increase their size, in order to pass to a larger theatre and to accomplish the propagation of the large animal. It is true that the souls of spermatic human animals are not rational and do not become so until conception determines these animals to the human nature. And as generally

animals are not born altogether in conception or *generation*, neither do they perish altogether in what we call *death;* for it is reasonable that what does not begin naturally, should not end either in the order of nature. Therefore, quitting their mask or their rags, they merely return to a more subtile theatre where they can, nevertheless, be just as sensitive and just as well regulated as in the larger. And what we have just said of large animals, takes place also in the generation and death of smaller spermatic animals, in comparison with which the former may pass for large; for everything extends *ad infinitum* in nature.

Thus not only souls, but also animals, are ingenerable and imperishable: they are only developed, unfolded, reclothed, unclothed, transformed: souls never quit their entire body and do not pass from one body into another which is entirely new to them.

There is therefore no *metempsychosis*, but there is *metamorphosis;* animals change, take and leave only parts: the same thing which happens little by little and by small invisible particles but continually in nutrition, and suddenly, visibly but rarely in conception or death, which cause a gain or loss of everything at one time.

7. Up to this time we have spoken as simple physicists: now we must advance to metaphysics by making use of the great principle, little employed in general, which teaches that *nothing happens without a sufficient reason;* that is to say, that nothing happens without its being possible for him who should sufficiently understand things, to give a reason sufficient to determine why it is so and not otherwise. This principle laid down, the first question which should rightly be asked, would be, *Why is there something rather than nothing?* For nothing is simpler and easier than something. Further, suppose that things must exist, we must be able to give a reason *why they must exist so* and not otherwise.

8. Now this sufficient reason for the existence of the universe could not be found *in the series of contingent things*, that is, of bodies and of their representations in souls; for matter being indifferent in itself to motion and to rest and to this or another motion, we could not find the reason of motion in it, and still less of a certain motion. And although the present motion which is in matter, comes from the preceding motion, and that from still another preceding, yet in this way we should never make any progress, go as far as we might; for the same question would always remain.

Therefore it must be that the sufficient reason which has no need of another reason, be outside this series of contingent things and be found in a substance which is its cause, or which is a necessary being, carrying the reason of its existence within itself; otherwise we should still not have a sufficient reason in which we could rest. And this final reason of things is called G*od.*

9. This simple primitive substance must contain in itself eminently the perfections contained in the derivative substances which are its effects; thus it will have perfect power, knowledge and will: that is, it will have omnipotence and sovereign goodness. And as justice, taken generally, is only goodness conformed to wisdom there must too be sovereign justice in God. The reason which has caused things to exist by him, makes them still dependent upon him in existing and in working: and they are continually receiving from him that which gives them some perfection; but the imperfection which remains in them, comes from the essential and original limitation of the creature.

10. It follows from the supreme perfection of God, that in creating the universe he has chosen the best possible plan, in which there is the greatest variety together with the greatest order; the best arranged ground, place, time; the most results produced in the most simple ways; the most of power, knowledge, happiness and goodness in the creatures that the universe could

permit. For since all the possibles in the understanding of God laid claim to existence in proportion to their perfections, the actual world, as the resultant of all these claims, must he the most perfect possible. And without this it would not be possible to give a reason why things have turned out so rather than otherwise.

11. The supreme wisdom of God compelled him to choose the *laws of movement* best adjusted and most suited to abstract or metaphysical reasons. He preserves there the same quantity of total and absolute force, or of actions; the same quantity of respective force or of reaction; lastly the same quantity of directive force. Farther, action is always equal to reaction, and the whole effect is always equivalent to the full cause. And it is not surprising that we could not by the mere consideration of the *efficient causes* or of matter, account for those laws of movement which have been discovered in our time, and a part of which have been discovered by myself. For I have found that it was necessary to have recourse to *final causes,* and that these laws do not depend upon the *principle of necessity,* like logical, arithmetical and geometrical truths, but upon the *principle of fitness,* that is, upon the choice of wisdom. And this is one of the most efficacious and evident proofs of the existence of God, to those who can examine these matters thoroughly.

‘ 12. It follows, farther, from the perfection of the supreme author, that not only is the order of the entire universe the most perfect possible, but also that each living mirror representing the universe in accordance with its point of view, that is to say, that each *monad,* each *substantial centre,* must have its perceptions and its desires as well regulated as is compatible with all the rest. Whence it follows, still farther, that *souls,* that is, the most dominating monads, or rather, animals, cannot fail to awaken from the state of stupor in which death or some other accident may put them.

13. For everything in things is regulated once for all with as much order and harmony as is possible, supreme wisdom and goodness not being able to act except with perfect harmony. The present is big with the future, the future could he read in the past, the distant is expressed in the near. One could become acquainted with the beauty of the universe in each soul, if one could unfold all its folds, which only develop visibly in time. But as each distinct perception of the soul includes innumerable confused perceptions which comprise the whole universe, the soul itself knows the things of which it has perception only so far as it has distinct and clear perceptions of them.

Each soul knows the infinite, knows all, but confusedly. As in walking on the sea-shore and hearing the great noise which it makes, I hear the individual sounds of each wave, of which the total sound is composed, but without distinguishing them; so our confused perceptions are the result of the impressions which the whole universe makes upon us. It is the same with each monad. God alone has a distinct consciousness of everything, for he is the source of all. It has been well said that he is as centre everywhere, but that his circumference is nowhere, since without any withdrawal from this centre, everything is immediately present to him.

14. As regards the rational soul, or *spirit,* there is something in it more than in the monads, or even in simple souls. It is not only a mirror of the universe of creatures, but also an image of the Divinity. The *spirit* has not only a perception of the works of God, but it is even capable of producing' something which resembles them, although in miniature. For, to say nothing of the marvels of dreams where we invent without trouble, and even involuntarily, things which when awake we should have to think a long time in order to hit upon, our soul is architectonic in its voluntary actions also, and, discovering the sciences according to which God has regulated things (*pondéré*, *mensura*, *numéro*, etc.), it imitates, in its department and in the

little world where it is permitted to exercise itself, what God does in the large world.

15. This is why all spirits, whether of men or of genii, entering by virtue of reason and of the eternal truths into a sort of society with God, are members of the City of God, that is to say, of the most perfect state, formed and governed by the greatest and best of monarchs; where there is no crime without punishment, no good actions without proportionate recompense; and finally as much virtue and happiness as is possible; and this is not by a derangement of nature, as if what God prepares for souls disturbed the laws of bodies, but by the very order of natural things, in virtue of the harmony pre-established for all time between the *realms of, nature and of grace*, between God as Architect and God as Monarch; so that *nature* leads to grace and *grace*, while making use of nature, perfects it.

16. Thus although reason cannot teach us the details, reserved to Revelation, of the great future, we can be assured by this same reason that things are made in a manner surpassing our desires. God also being the most perfect and most happy, and consequently, the most lovable of substances, and *truly pure love* consisting in the state which finds pleasure in the perfections and happiness of the loved object, this love ought to give us the greatest pleasure of which we are capable, when God is its object.

17. And it is easy to love him as we ought, if we know him as I have just described. For although God is not visible to our external senses, he does not cease to be very lovable and to give very great pleasure. We see how much pleasure honore give men, although they do not at all consist in the qualities of the external senses.

Martyrs and fanatics (although the affection of the latter is ill-regulated), show what pleasure of the spirit can accomplish; and what is more, even sensuous pleasures are reduced to confusedly known intellectual pleasures.

Music charms us, although its beauty only consists in the harmony of numbers and in the reckoning of the beats or vibrations of sounding bodies, which meet at certain intervals, of which we are not conscious and which the soul does not cease to make. The pleasures which sight finds in proportions are of the same nature; and those caused by the other senses amount to almost the same thing, although we cannot explain it so clearly.

18. It may be said that even from the present time on, the *love of God* makes us enjoy a foretaste of future felicity. And although it is disinterested, it itself constitutes our greatest good and interest even if we should not seek it therein and should consider only the pleasure which it gives, without regard to the utility it produces; for it gives us perfect confidence in the goodness of our author and master, producing a true tranquillity of mind; not like the Stoics who force themselves' to patience, but by a present content which assures us of future happiness. And besides the present pleasure, nothing can be more useful for the future; for the love of God fulfils our hopes, too, and leads us in the road of supreme happiness, because by virtue of the perfect order established in the universe, everything is done in the best possible way, as much for the general good as for the greatest individual good of those who are convinced of this and are content with the divine government; this conviction cannot he wanting to those who know how to love the source of all good. It is true that supreme felicity, by whatever *beatific vision* or knowledge of God it be accompanied, can never be full; because, since God is infinite, he cannot be wholly known. Therefore our happiness will never, and ought not, consist in full joy, where there would be nothing farther to desire, rendering our mind stupid; but in a perpetual progress to new pleasures and to new perfections.

THE MONADOLOGY. 1714.

[From the French.]

1. THE *MONAD* of which we shall here speak is merely a simple substance, which enters into compounds; *simple,* that is to say, without parts.

2. And there must he simple substances, since there are compound substances, for the compound is only a collection or *aggregatum* of simple substances.

3. How where there are no parts, neither extension, figure nor divisibility is possible. And these monads are the true atoms of nature, and, in a word, the elements of things.

4. Dissolution also is not at all to be feared, and there is no conceivable way in which a simple substance can perish naturally.

5. For the same reason there is no way in which a simple substance can begin naturally, since it cannot be formed by composition.

6. Thus it may he said that the monads can only begin or end *all at once,* that is to say, they can only begin by creation and end by annihilation; whereas that which is compound begins or ends by parts.

7. There is also no way of explaining how a monad can he altered or changed internally by any other creature, for nothing can he transposed within it, nor can there he conceived in it any internal movement which can he excited, directed, augmented or diminished within it as can be done in compounds, where there is change among the parts. The monads have no windows through which anything can enter or depart. The *accidents* cannot detach themselves or go forth from the substances, as did formerly the

sensible species of the Schoolmen. Likewise neither substance nor accident can enter a monad from without.

8. Nevertheless, the monads must have some qualities, otherwise they would not even he entities. And if simple substances did not differ at all in their qualities there would be no way of perceiving any changes in things, since what is in the compound can only come from the simple ingredients, and if the monads were without qualities they could not be distinguished the one from the other, since also they do not differ in quantity. Consequently, a plenum being supposed, each place in any movement could receive only the equivalent of what it had had before, and one state of things would not be distinguishable from (another.

9. Moreover it is necessary that each monad should differ from every other. For never in nature are two beings exactly alike and such that it is not possible to find an internal difference or one founded upon an intrinsic connotation.

10. I take it also for granted that every created being, and consequently the created monad also, is subject to change, and even that this change is continual in each.

11. It follows from what has just been said, that the natural changes of the monads proceed from an *internal principle,* since an external cause could not influence their interior.

12. But besides the principle of change, there must be *a detail of that which changes,* which forms, so to speak, the specification and variety of the simple substances.

13. This detail must involve multitude in the unity or in the simple. For since every natural change is made by degrees, something changes and something remains; consequently, there must be in the simple substance a plurality of affections and of relations, although not of parts.

14. The transient state, which involves and represents multitude in unity or in the simple substance, is only what we call *perception,* which must be distinguished from apperception or from consciousness, as will appear in what follows. Here it is that the Cartesians especially failed, having made no account of the perceptions of which we are not conscious. It is this also which made them suppose that spirits only are monads and that there are no souls of brutes or of other entelechies. They, with the vulgar, have also confounded a long state of unconsciousness with death strictly speaking, and have therefore agreed with the old scholastic prejudice of entirely separate souls, and have even confirmed weaker minds in their belief in the mortality of the soul.

15. The action of the internal principle which causes the change or the passage from one perception to another, may be called *appetition;* it is true that the desire cannot always completely attain to the whole perception toward which it tends, but it always attains to something of it and arrives at new perceptions.

16. We experience in ourselves multitude in a simple substance, when we find that the most trifling thought of which we are conscious involves variety in the object. Thus all those who admit that the soul is a simple substance must also admit this multitude in the monad, and M. Bayle ought not to find in it ‘the difficulties which he mentions in his Dictionary, article *Rorarius.*

17. We must confess, moreover, that *perception* and that which depends on it *are inexplicable by mechanical causes,* that is, by figures and motions. And, supposing that there were a machine so constructed as to cause thought, feeling and perception, we could conceive of it as enlarged and yet preserving the same proportions, so that we might enter it like a mill. And this granted, we should only find on visiting it, pieces which push one against another, but never any thing by which to explain a perception. It

must be sought for, therefore, in the simple substance and not in the compound or machine. Nothing but this, also, can be found in the simple substance; and it is in this alone that all the *internal actions* of simple substances consist.

18. The name of *entelechies* might be given to all simple substances or created monads, for they have within themselves a certain perfection; there is a certain sufficiency which renders them the sources of their internal actions, and so to speak, incorporeal automata.

19. If we choose to give the name *soul* to everything that has *perceptions* and *desires* in the general sense which I have just explained, all simple substances or created monads may be called souls, but as feeling is something more than a simple perception, I consent that the general name of monads or entelechies shall suffice for those simple substances which have only perception, and that only those substances shall be called *souls* whose perception is more distinct and is accompanied by memory.

20. For we experience in ourselves a state in which we remember nothing and have no distinguishable perceptions, as, for instance, when we fall in unconsciousness or when we are overpowered by a profound and dreamless sleep. In this state the soul does not differ sensibly from a simple monad; but as this state is not continuous and as the soul frees itself from it, it is something more than a mere monad.

21. And it does not at all follow that therefore the simple sub stance is without any perception. This is indeed impossible, for the reasons mentioned above; for it cannot perish, nor can it subsist without some affection, which is nothing else than perception; but when there is a great number of minute perceptions, where nothing is distinct, we are stunned, as when we turn continually in the same direction many times in succession, whence arises a dizziness which may make us lose consciousness, and

which does not allow us to see anything distinctly. So death may for a time produce this condition in animals.

22. And as every present state of a simple substance is naturally the consequence of its preceding state, so its present is big with its future.

23. Therefore, since on being awakened from a stupor, we are aware of our perceptions, we must have had them immediately before although we were entirely unconscious of them; for one perception can only come naturally from another perception as one motion can only come naturally from another motion.

24. From this we see that if there were nothing distinct, nothing, so to speak, in relief and of a higher flavor, in our perceptions, we should always be in a dazed state. This is the condition of the naked monad.

25. So also we see that nature has given to animals higher perceptions, by the pains she has taken to furnish them with organs which collect, many rays of light or many undulations of air, in order to render them more efficacious by their union. There is something of the same kind in odor, in taste, in touch and perhaps in a multitude of other senses which are unknown to us. I shall presently explain how that which takes place in the soul represents that which occurs in the organs.

26. Memory furnishes souls with a sort of *consecutiveness* which imitates reason, but which ought to be distinguished from it. We observe that animals, having the perception of something which strikes them and of which they have had a similar perception before, expect, through the representations of their memory, that which was associated with it in the preceding perception, and experience feelings similar to those which they had had at that time. For instance, if we show dogs a stick, they remember the pain it has caused them and whine and run.

27. And the powerful imagination which strikes and moves them, arises either from the magnitude or the multitude of preceding perceptions. For

often a strong impression produces all at once the effect of a long continued *habit,* or of many times repeated moderate perceptions.

28. Men act like the brutes in so far as that the consecutiveness of their perceptions only results from the principle of memory, resembling the empirical physicians who practice without theory, and we are simple empirics in three-fourths of our actions. For example, when we expect that there will be daylight to-morrow, we are acting as empirics, because that has up to this time always taken place. It is only the astronomer who judges of this by reason.

29. But the knowledge of necessary and eternal truths is what distinguishes us from mere animals and furnishes us with *reason* and the sciences, by raising us to a knowledge of ourselves and of God. This is what we call the reasonable soul or *spirit* within us.

30. It is also by the knowledge of necessary truths, and by their abstractions, that we rise to *acts of reflection,* which make us think of that which calls itself "*If* and consider that this or that is within *us;* and it is thus that, in thinking of ourselves, we think of being, of substance, simple or compound, of the immaterial and of God himself, conceiving that what with us is limited is with him without limit. These reflective acts furnish the principal objects of our reasonings.

31. Our reasonings are founded on *two great principles, that of contradiction,* by virtue of which we judge that to be *false* which involves it, and that *true,* which is opposed or contradictory to the false.

32. And *that of the sufficient reason,* by virtue of which we consider that no fact can be real or existent, no statement true, unless there be a sufficient reason why it is so and not otherwise, although most often these reasons cannot be known to us.

33. There are also two kinds of truths, those of reasoning and those of fact. Truths of reasoning are necessary and their opposite is impossible, and

those of *fact* are contingent and their opposite, is possible. When a truth is necessary its reason can be found by analysis, resolving it into more simple ideas and truths until we reach those which are primitive.

34. It is thus that mathematicians by analysis reduce speculative *theorems* and practical c*anons* to *definitions, axioms* and *postulates.*

35. Finally there are simple ideas, definitions of which cannot be given; there are also axioms and postulates, in a word, *primary principles,* which cannot be proved and indeed need no proof, and these are *identical propositions,* the opposite of which contains an express contradiction.

36. But there must also be a sufficient reason for contingent truths, or those of fact, — that is, for the series of things diffused through the universe of created objects — where the resolution into particular reasons might run into a detail without limits, on account of the immense variety of objects and the division of bodies *ad infinitum.* There is an infinity of figures and of movements, present and past, which enter into the efficient cause of my present writing, and there is an infinity of trifling inclinations and dispositions, past and present, of my soul, which enter into the final cause.

37. And as all this *detail* only involves other contingents, anterior or more detailed, each one of which needs a like analysis for its explanation, we make no advance, and the sufficient or final reason must be outside of the sequence or *series* of this detail of contingencies, however infinite it may be.

38. And thus it is that the final reason of things must be found in a necessary substance, in which the detail of changes exists only eminently, as in their source, and this it is which we call GOD.

39. Now this substance being the sufficient! reason of all this detail, which also is linked together throughout, *there is but one God, and this God suffices.*

40. We may judge also that this supreme substance, which is unique, universal and necessary, having nothing outside of itself which is independent of it, and being the simple series of possible being, must be incapable of limitations and must contain as much of reality as is possible.

41. Whence it follows that God is absolutely perfect, *perfection* being only the magnitude of positive reality taken in its strictest meaning, setting aside the limits or bounds in that which is limited. And there where there are no limits, that is, in God, perfection is absolutely infinite.

42. It follows also that creatures have their perfections from the influence of God, but that their imperfections arise from their own nature incapable of existing without limits. For it is by this that they are distinguished from God.

43. It is also true that in God is the source not only of existences but also of essences, so far as they are real, or of that which is real in the possible. This is because the understanding of God is the region of eternal truths, or of the ideas on which they depend, and because, without him, there would be nothing real in the possibilities, and not only nothing existing but also nothing possible.

“. Nevertheless, if there is a reality in the essences or possibilities or in the eternal truths, this reality must be founded in something existing and actual; consequently in the existence of the necessary being in whom essence involves existence or with whom it is sufficient to be possible in order to be actual.

45. Hence God (or the necessary being) alone has this privilege that he must exist if it is possible. And since nothing can hinder the possibility of that which possesses no limitations, no negation, and, consequently, no contradiction, this alone is sufficient to establish the existence of God à priori. We have also proved it by the reality of the eternal truths. But we have just proved it also à posteriori, since contingent beings exist which can

only have their final or sufficient reason in a necessary being who has the reason of his existence in himself.

46. But it must not be imagined, as is sometimes done, that the eternal truths, being dependent upon God, are arbitrary and depend upon his will, as Descartes seems to have conceived, and afterwards M. Poiret. This is true only of contingent truths, the principle of which *is fitness* or the choice of the *best,* whereas necessary truths depend solely on his understanding and are its internal object.

47. Thus God alone is the primitive unity or the original simple substance; of which all monads, created or derived, are the products, and are born, so to speak, from moment to moment by continual fulgurations of the Divinity, limited by the receptivity of the creature, to which limitation is essential.

48. In God is *Power,* which is the source of all; then *Knowledge,* which contains the detail of ideas; and finally *Will,* which effects changes or products according to the principle of the best. It is this which corresponds to what in created monads forms the subject or basis, the perceptive and the appetitive faculty. But in God these attributes are absolutely infinite or perfect, and in the created monads or in the *entelechies* (or *perfectihabies,* as Harmolaus Barbaras translated the word), they are only imitations proportioned to their perfection.

49. The creature is said to *act* externally in so far as it is perfect, and to *suffer* from another in so far as it is imperfect. Thus *action* is attributed to the monad in so far as it has distinct perceptions, and *passion* in so far as it has confused perceptions.

50. And one creature is more perfect than another in that there is found in it that which serves to account à priori for what takes place in another, and it is in this way that it is said to act upon another.

51. But in simple substances the influence of one monad, upon another is purely *ideal,* since it can take effect only through the introduction of God, inasmuch as in the ideas of God a monad may demand with reason that God in regulating the others from the commencement of things, have regard to it. For since a created monad can have no physical influence upon the interior of another, it is only in this way that one can be dependent upon another.

52. And hence it is that the actions and passions of creatures are mutual. For God, in comparing two simple substances, finds in each one reasons which compel him to adjust the other to it, and consequently that which in certain respects is active, is according to another point of view, passive; *active* in so far as that what is known distinctly in it, serves to account for that which takes place in another; and *passive* in so far as the cause of what takes place in it, is found in that which is distinctly known in another.

53. Now, as there is an infinity of possible universes in the idea of God, and as only one of them can exist, there must he a sufficient reason for the choice of God, which determines him for one rather than for another.

54. And this reason can only he found in the *fitness,* in the degrees of perfection, which these worlds contain, each possible world having a right to claim existence according to the measure of perfection which it possesses.

55. And this is the cause of the existence of the Best, which wisdom makes known to God, which his goodness chooses and which his power produces.

56. Now this *connection,* or this adaptation of all created things to each and of each to all, brings it about that each simple substance has relations which express all the others, and that consequently it is a living, perpetual mirror of the universe.

57. And as the same city regarded from different sides appears entirely different and in *perspective* is as if ‘multiplied, so also it happens that,

because of the infinite multiplicity of simple substances, there are as it were so many different universes, which are nevertheless only the perspectives of a single one, from the different *points of view* of each monad.

58. And this is the way to obtain as great a variety as possible, but with the greatest possible order; that is, it is the way to obtain as much perfection as possible.

59. Thus this hypothesis (which I dare to assert is demonstrated) is the only one which brings into relief the grandeur of God. M. Bayle recognized this, when in his Dictionary (Art. Rorarius) he objected to it; where indeed he was tempted to believe that I accorded to God more than was possible. But he can state no reason why this universal harmony which brings it about that each substance expresses exactly all others by the relations which it sustains to them, is impossible.

60. Besides, we can see in what I have just said à priori reasons why things could not be otherwise, because God, in regulating all, has regard to each part, and particularly to each monad, since, its nature being representative, nothing can limit it to representing only a part of things; although it may be true that this representation is but confused as regards the detail of the whole universe, and can be distinct only in the case of a small part of things, that is to say, in the case of those which are nearest or largest in relation to each of the monads — otherwise each monad would be a divinity.

It is not in the object but only in the modification of the knowledge of the object, that monads are limited. They all tend confusedly toward the infinite, toward the whole, but they are limited, and distinguished by their degrees of distinct perceptions.

61. And in this respect compound substances symbolize with simple substances. For since the world is a plenum, making all matter connected, and since in a plenum every movement has some effect on distant bodies in

proportion to their distance, so that each body is affected not only by those which touch it and feels in some way all that happens to them but also by their means is affected by those which touch the first with which it is in immediate contact, it follows that this communication extends to any distance whatever. Consequently, each body feels all that passes in the universe, so that he who sees all, could read in each that which passes everywhere else, and even that which has been or shall be, perceiving in the present that which is removed in time as well as in space; συμπνοια παντα, said Hippocrates. But a soul can read in itself only that which is distinctly represented in it. It cannot develop its laws all at once, for they reach into the infinite.

62. Thus, although each created monad represents the entire universe, it represents most distinctly the body which is particularly appropriated to it and of which it forms the entelechy; and as this body represents the whole universe by the connection of all matter in a plenum, the soul also represents the whole universe by representing that body which especially belongs to it.

63. The body belonging to a monad, which is its entelechy or soul, constitutes, with the entelechy, what may be called a *living being*, and with the soul, what may be called an *animal*. Now this body of a living being or of an animal is always organic, for since every monad is in its way a mirror of the universe, and since the universe is arranged in perfect order, there must also be order in the representative, that is, in the perceptions of the soul, and hence in the body, according to which the universe is represented in it.

64. Thus each organic body of a living being is a kind of divine machine or natural automaton, which infinitely surpasses all artificial automata, because a machine which is made by man’s art is not a machine in each one of its parts; for example, the tooth of a brass wheel has parts or fragments

which to us are no longer artificial and have nothing in themselves to show the use to which the wheel was destined in the machine. But nature's machines, that is, living bodies, are machines even in their smallest parts *ad infinitum.* Herein lies the difference between nature and art, that is, between the divine art and ours.

65. And the author of nature has been able to contrive these divine and infinitely marvellous works of art, because each portion of matter is not only divisible *ad infinitum*, as the ancients perceived, but also each part is actually endlessly subdivided into parts of which each has its own motion: otherwise it would be impossible for each portion of matter to express the universe.

66. Hence we see that there is a world of creatures, of living beings, of animals, of entelechies, of souls, in the smallest particle of matter.

67. Each portion of matter may be conceived of as a garden full of plants, and as a pond full of fishes. But each branch of the plant, each member of the animal, each drop of its humors is also such a garden or such a pond.

68. And although the earth or air embraced between the plants of the garden, or the water between the fish of the pond, is neither plant nor fish, they yet contain more of them, but for the most part so tiny as to be to us imperceptible.

69. Therefore there is nothing uncultivated, nothing sterile, nothing dead in the universe, no chaos, no confusion except in appearance. Just as a pond would appear from a distance in which we might see the confused movement and swarming, so to speak, of the fishes in the pond, without perceiving the fish themselves.

70. We see thus that each living body has a ruling entelechy which is the soul in the animal, but the members of this living body are full of other

living beings — plants, animals — each of which has also its entelechy or governing soul.

71. But it must not be imagined, as has been done by some people who have misunderstood my thought, that each soul has a mass or portion of matter appropriated to it or united to it forever, and that hence it possesses other inferior living beings destined to its service forever. For all bodies are, like rivers, in a perpetual flux, and parts are entering into them and departing from them continually.

72. Thus the soul changes its body only gradually and by degrees, so that it is never deprived of all its organs at once. There is often a metamorphosis in animals, but never metempsychosis nor transmigration of souls. There are also no entirely *separate* souls, nor *genii* without bodies. God alone is wholly without body.

73. For which reason also, it happens that there is, strictly speaking, neither complete generation nor entire death, where the soul is separated from the body. What we call generation is development or increase, as also what we call *death* is envelopment and diminution.

74. Philosophers have been greatly puzzled over the origin of forms, entelechies, or souls; but to-day, when we know by exact investigations of plants, insects and animals, that organic bodies in nature are never produced from chaos or from putrefaction, but always from seeds, in which there was undoubtedly *some pre-formation,* it has been thought that not only the organic body was already there before conception, but also a soul in this body, and, in a word, the animal itself; and that by means of conception this animal has merely been disposed to a greater transformation, in order to become an animal of another kind. Something similar is seen outside of generation, as when worms become flies, and caterpillars, butterflies.

75. The *animals,* some of which are raised by conception to the grade of larger animals, may be called *spermatics;* but those among them, which

remain in their class, that is, the most part, are born, multiply, and are destroyed like the larger animals, and there is only a small number of chosen ones, which pass to a larger theatre.

76. But this were only half the truth; I have therefore thought that if the animal never has a natural beginning, it cannot end naturally; and that not only will there be no generation, but also no utter destruction, or death strictly speaking. And these reasonings, made *à posteriori* and drawn from experience, harmonize perfectly with principles deduced *à priori,* as above.

77. Thus it may be said that not only the soul (mirror of an indestructible universe) is indestructible, but also the animal itself, although its machine often perishes in part and takes on or puts off organic spoils.

78. These principles have given me the means of explaining naturally the union or rather the conformity of the soul and the organic body. The soul follows its own peculiar laws and the body also follows its own laws, and they meet by virtue of the *pre-established, harmony* between all substances, since they are all representations of one and the same universe.

79. Souls act according to the laws of final causes, by appetitions, ends and means. Bodies act in accordance with the laws of efficient causes or of motion. And the two realms, that of efficient causes and that of final causes, are in harmony with each other.

80. Descartes recognized that souls cannot give any force to bodies, because there is always the same quantity of force in matter; nevertheless he believed that the soul could change the direction of bodies. But it was because, in his day, the law of nature which enforces the conservation of the total direction in matter, was not known. If he had known this, he would have lighted upon my system of the pre-established harmony.

81. By this system it comes about that bodies act as if (what is impossible) there were no souls, and that souls act as if there were no bodies, and that both act as if each influenced the other.

82. As to spirits or rational souls, although I find that the same thing which I have stated — namely, that animals and souls begin only with the world and end only with the world — holds good at bottom with regard to all animals and living things, yet there is this peculiarity in rational animals, that their spermatic animalcules, as such, have only ordinary or sensitive souls, but as soon as those which are, so to speak, elected, attain by actual conception to human nature, their sensitive souls are elevated to the rank of reason and to the prerogative of spirits, 83. Among other differences which exist between ordinary souls and spirits, a part of which I have already mentioned, there is furthermore, this, that souls in general are the living mirrors or images of the universe of creatures, but spirits are in addition images of the Divinity itself, or of the author of nature, able to know the system of the universe and to imitate something of it by architectonic samplings, since every spirit is as a little divinity in its own department.

84. Hence it comes about that spirits are capable of entering into a sort of society with God, and that he is, in relation to them, not only what an inventor is to his machines (as God is in relation to the other creatures), but also what a prince is to his subjects and even a father to his children.

85. Whence it is easy to conclude that the assembly of all spirits must compose the City of God, that is, the most perfect state which is possible, under the most perfect of monarchs.

86. This City of God, this truly universal monarchy, is a moral world within the natural world, and the highest and most divine of the works of God; it is in this that the glory of God truly consists, for he would have none if his greatness and goodness were not known and admired by spirits. It is, too, only in relation to the divine city that he possesses, properly, goodness; while his wisdom, and power are everywhere manifest.

81. As we have above established perfect harmony between two natural kingdoms, the one of efficient, the other of final causes, we should also

notice here another harmony between the physical kingdom of nature and the moral kingdom of grace; that is, between God considered as the architect of the mechanism of the universe, and God, considered as monarch of the divine city of spirits.

88. This harmony makes all things progress toward grace by natural methods. This globe, for example, must be destroyed and repaired by natural means, at such times as the government of spirits may demand it, for the punishment of some and the reward of others.

89. It may be said, farther, that God as architect satisfies in every respect God as legislator, and that therefore sins, by the decree of nature and by virtue even of the mechanical structure of things, must carry their punishment with them; and that in the same way, good actions will obtain their rewards by mechanical ways through their relation to bodies, although this may not and ought not always happen immediately.

90. Finally, under this perfect government, there will be no good action without reward, no bad action without punishment, and everything must result for the well-being of the good, that is, of those who are not discontented in this great State, who, after having done their duty, trust in providence, and who love and imitate as they ought the author of all good, pleasing themselves with the contemplation of his perfections, — according to the nature of truly *pure love*, which takes pleasure in the happiness of the loved one. This is what causes wise and virtuous persons to work at all which seems conformable to the divine will, presumptive or antecedent, and yet to content themselves with that which God in reality sends by his secret, consequent and decisive will, recognizing that if we could sufficiently comprehend the order of the universe we would find that it surpassed all the wishes of the wisest, and that it is impossible to render it better that it is, not only for all in general, but also for ourselves in particular, if we are attached, as we should be, to the author of all, not only as the architect and

efficient cause of our being, but also as our master and final cause, who ought to be the sole aim of our volition, and who can alone secure our happiness.

ON THE DOCTRINE OF MALEBRANCHE. A LETTER TO M. REMOND DE MONTMORT, CONTAINING REMARKS ON THE BOOK OF FATHER TERTRE AGAINST FATHER MALEBRANCHE. 1715.

[From the French.]

SIR, I HAVE just received your package, and I thank you for the interesting articles which you have sent me. I say nothing on the continuation of Homer; but as, after the sacred books, he is the most ancient of all the authors whose works remain to us, I wish that some one would undertake to clear up the historical and geographical difficulties which remote antiquity has produced in these works, and principally in the Odyssey, relating to ancient geography; for, however fabulous the travels of Ulysses may be, it is nevertheless certain that Homer carried him into countries then spoken of but which it is difficult now to recognize.

I pass to the philosophical articles which relate to the Reverend Father Malebranche (whose loss I greatly regret), and which tend to elucidate the natural theology of the Chinese. The *Refutation* of the system of this Father, divided into three small volumes, is without doubt from a man of ability, for it is clear and ingenious. I even approve of a part of it, but part of it is too extreme. Too much divergence is here shown from the views of Descartes and of Father Malebranche, even when they receive a good meaning. It should be time to give up these enmities, which the Cartesians have perhaps drawn upon themselves by showing too much contempt for the ancients and for the schoolmen, in whom there is nevertheless solidity meriting our attention. Thus justice ought to be shown on the one side and on the other,

and we are to profit by the discoveries of both, as it is right to reject that which each advances without foundation.

1. It is right to refute the Cartesians when they say that the soul is nothing but thought; as also when they say that matter is nothing but extension. For the soul is a subject or *concretum* which thinks, and matter is an extended subject or subject endowed with extension. This is why I hold that space must not be con founded with matter, although I agree that naturally there is no void space; the scholastics are right in distinguishing the *concretes* and the *abstracts*, when it is a matter of exactness.

2. I concede to the Cartesians that the soul actually always thinks, but I do not grant that it is conscious of all these thoughts. For our great perceptions and our great appetites of which we are conscious, are composed of innumerable little perceptions and little inclinations of which we cannot be conscious. And it is in the insensible perceptions that the reason is found of what passes in us; as the reason of what takes place in sensible bodies consists in insensible movements.

3. There is good reason also for refuting Reverend Father Malebranche especially when he maintains that the soul is purely passive. I think I have demonstrated that every substance is active, and especially the soul. This is also the idea which the ancients and the moderns have had of it; and the *entelechy* of Aristotle, which has made so much noise, is nothing else but force or activity; that is, a state from which action naturally flows if nothing hinders it. But *matter*, *primary* and pure, taken without the souls or lives which are united to it, is purely passive; properly speaking also it is not a substance, but something incomplete. And *secondary matter*, as for example, body, is not a substance, but for another reason; which is, that it is a collection of several substances, like a pond full of fish, or a flock of sheep; and consequently it is what is called *unum per accidens,* in a word, a phenomenon. A true substance, such as an animal, is composed of an

immaterial soul, and an organized body; and it is the compound of these two which is called un*um per se.*

4. As to the *efficiency of second causes,* it is again right to maintain it against the opinion of this Father. I have demonstrated that each simple substance, or monad (such as souls), follows its own laws in producing its actions, without being capable of being troubled therein by the influence of another created simple substance; and that thus bodies do not change the ethico-logical laws of souls, any more than souls change the physico-mechanical laws of bodies. This is why second causes really act, but without any influence of one created simple substance upon another; and souls harmonize with bodies and among themselves, in virtue of the preëstablished harmony, and not at all by a mutual physical influence; except in the case of the metaphysical union of the soul and its body which makes them compose *unum, per se,* an animal, a living being.. It has been right, therefore, to refute the opinion of those who deny the action of second causes; but it must be done without renewing false influences, such as the *species* of the school.

5. Father Malebranche made use of this argument: That extension not being a mode of being of matter, must be its substance. The author of the Refutation (Vol. I, p. 91), distinguishes between the positive modes of being; and he claims that extension is one of the modes of being of the second sort, which he thinks can be conceived by themselves. But these are not positive modes of being; they all consist in the variety of limitations, and all cannot be conceived save by the being of which they are the modes and ways. And as to extension it may be said that it is not a mode of being of matter, and nevertheless is not a substance either. What is it, then? you will ask, sir. I reply that it is an attribute of substances, and there is a clear difference between attributes and modes of being.

6. It appears to me, also, that the author of the Refutation does not well combat the opinion of' the Cartesians on the infinite, which they with reason consider as prior to the finite, and of which the finite is but a limitation. He says (p. 303 of Vol. I), that if the mind had a clear and direct view of the infinite, Father Malebranche would not have had need of so much reasoning to make us think of it. But by the same argument he would reject the very simple and very natural knowledge we have of the Divinity. These kinds of objections amount to nothing, for there is need of labor and application in order to give to men the attention necessary for the simplest notions, and this end will only be reached by recalling them from their dissipation to themselves. It is also for this reason that the theologians who have composed works on eternity, have much need of discourse, of comparisons and of examples to make it well understood; although there is nothing more simple than the notion of eternity. But it is because, in such matters, all depends on attention. The author adds (Vol. I, p. 301), that in the pretended knowledge of the infinite, the mind sees merely that lengths may be put end to end and repeated as many times as is wished. Very good; but this author should consider that to know that this repetition can always be made, is already to know the infinite.

7. The same author examines in his second volume the natural theology of Father Malebranche; but his performance appears to me overdone, although he declares that he merely presents the doubts of others. The Father saying that God is being in general, this is taken for a vague and notional being, as is the genus in logic; and little more is needed to accuse Malebranche of atheism. But I think that the Father understood not a vague and indeterminate being, but absolute being, which differs from particular limited beings as absolute and boundless space differs from a circle or square.

8. There is more likelihood of combating the opinion of Malebranche on ideas. For there is no necessity (seemingly) for taking them for something external to us. It is sufficient to regard ideas as notions, that is to say, as modifications of our soul. It is thus that the schoolmen, Descartes, and Arnauld, regard them. But as God is the source of possibilities and consequently of ideas, the. Father may be excused and even praised for having changed the terms and given to ideas a more exalted signification, in distinguishing them from notions and in taking them for perfections in God which we participate in by our knowledge. This mystical language of the Father was not then necessary; but I find it useful, for it better brings before the mind our dependence on God. It even seems that Plato, speaking of ideas, and St. Augustine, speaking of truth, had kindred thoughts, which I find very remarkable; and this is the part of Malebranche's system which I should like to have retained, with the phrases and formulas which depend on it, as I am very glad that the most solid part of the theology of the mystics is preserved. And far from saying with the author of the Refutation (Vol. 2, p. 304), that the system of St. Augustine is *a little infected with the language and opinions of the Platonists;* I would say that it is thereby enriched and set in relief.

9. I say almost as much of the opinion of Father Malebranche when he affirms that *we see all things in God.* I say that it is an expression which may be excused and even praised, provided it be rightly taken; for it is easier to fall into mistake in this than in the preceding article on ideas. It is, therefore, well to observe that not only in Malebranche's system but also in mine, God alone is the immediate external object of souls, exercising upon them a real influence. And although the current school seems to admit other influences, by means of certain species, which it believes that objects convey into the soul, it does not fail to recognize that all our perfections are a continual gift of God, and a limited participation in his infinite perfection.

This suffices to show that what there is true and good in our knowledge is still an emanation from the light of God, and that it is in this sense that it may be said, that *we see all things in God.*

10. The third volume refutes the system of revealed theology of Father Malebranche, in reference especially to grace and predestination. But as I have not sufficiently studied the particular theological opinions of the author, and as I think I have sufficiently elucidated the matter in my essay *La Théodicée*, I excuse myself from entering upon it at present.

It would now remain to speak to you, sir, of the natural theology of the *Lettres Chinois,* according to what the Jesuit Father Longobardi and Father Antoine de St. Marie, of the Minorite order, report to us thereon in the treatises which you have sent me, in order to have my opinion of them; as well as of the mode which Reverend Father Malebranche has employed to give to a cultivated Chinaman some insight into our theology. But this requires a separate letter; this which I have just written being already sufficiently long. Referring for the rest to my preceding letter, I am zealously, sir, your very humble and very obedient servant,

Hanover, Nov. 4, 1715.

LEIBNITZ.

LETTERS TO SAM. CLARKE.

MR. LEIBNITZ'S FIRST PAPER: Being an Extract of a Letter written in November, 1715.

1. *NATURAL RELIGION itself* seems to decay *[in England*] very much. Many will have human *souls* to be material: others make *God himself* a corporeal Being.

2. Mr. *Locke*, and his followers, are *uncertain* at least, whether the *soul* be not *material*, and naturally perishable.

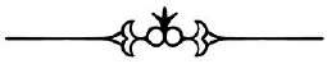
3. Sir *Isaac Newton* says, that space is an *organ*, which God makes use of to perceive things by. But if God stands in need of any *organ* to perceive things by, it will follow, that they do not depend altogether upon him, nor were produced by him.

4. Sir *Isaac Newton*, and his followers, have also a very odd opinion concerning the work of God. According to their doctrine, God Almighty wants to *wind up* his watch from time to time: otherwise it would cease to move. He had not, it seems, sufficient foresight to make it a perpetual motion. Nay, the machine of God's making, is so imperfect, according to these gentlemen; that he is obliged to *clean* it now and then by an extraordinary concourse, and even to *mend* it, as a clockmaker mends his work; who must consequently be so much the more unskillful a workman, as he is oftener obliged to mend his work and to set it right. According to *my* opinion, the *same* force and vigor remains always in the world, and only passes from one part of matter to another, agreeably to the laws of nature, and the beautiful *pre-established* order. And I hold, that when God works miracles, he does not do it in order to supply the wants of nature, but those

of *grace.* Whoever thinks otherwise, must needs have a very mean notion of the wisdom and power of God.

MR. LEIBNITZ'S SECOND PAPER: BEING AN ANSWER TO DR. CLARKE'S

First Reply.



1. IT IS rightly observed in the paper delivered to the Princess of Wales, which her Royal Highness has been pleased to communicate to me, that, next to corruption of manners, the principles of the materialists do very much contribute to keep up impiety. But I believe the author had no reason to add, that the mathematical principles of philosophy are opposite to those of the materialists. On the contrary, they are the same; only with this difference, that the materialists, in imitation of Democritus, Epicurus, and Holies, confine themselves altogether to mathematical principles, and admit only bodies; whereas the Christian mathematicians admit also immaterial substances. Wherefore, not mathematical principles (according to the usual sense of that word) but metaphysical principles ought to be opposed to those of the materialists. Pythagoras, Plato, and Aristotle in some measure, had a knowledge of these principles; but I pretend to have established them demonstratively in my Theodicaea, though I have done it in a popular manner. The great foundation of mathematics, is the principle of contradiction or identity, that is, that a proposition cannot he true and false at the same time; and that therefore A is A, and cannot be not A. This single principle is sufficient to demonstrate every part of arithmetic and geometry, that is, all mathematical principles. But in order to proceed from mathematics to natural philosophy, another principle is requisite, as I have observed in my Theodicaea: I mean, the principle of a sufficient reason, vis: that nothing happens without a reason why it should he so, rather than otherwise. And therefore Archimedes being desirous to proceed from

mathematics to natural philosophy, in his book De Æquililrio, was obliged to make use of a particular case of the great principle of a sufficient reason. He takes it for granted, that if there he a balance, in which every thing is alike on both sides, and if equal weights are hung on the two ends of that balance, the whole will be at rest. 'Tis because no *reason* can be given, why one side should weigh down, rather than the other. Now, by that single principle, *vis:* that *there ought, to le a sufficient reason why things should le so, and not otherwise,* one may demonstrate the being of a God*,* and all the other parts of *metaphysics* or *natural theology*; and even, in some measure, those principles of *natural philosophy,* that are independent upon *mathematics*: I mean, the *dynamic* principles, or the *principles of force.*

2. The author proceeds and says, that according to the mathematical principles, that is, according to Sir Isaac Newton's philosophy (for mathematical principles determine nothing in the present case,) matter is the most inconsiderable part of the universe. The reason is, because he admits empty space, besides matter; and because, according to *his* notions, *matter* fills up only a very small part of *space.* But *Democritus* and *Epicurus* maintained the same thing: they differed from Sir *Isaac Newton*, only as to the *quantity* of matter; and perhaps they believed there was *more* matter in the world, than Sir *Isaac Newton* will allow: wherein I think their opinion ought to be preferred; for, the *more* matter there is, the *more* God has occasion to exercise his wisdom and power. Which is one reason, among others, why I maintain that, there is *no vacuum* at all.

3. I find, in express words, in the *Appendix* to Sir *Isaac Newton's Optics,* that *space* is the *sensorium* of *God.* But the word *sensorium* hath always signified the *organ* of sensation. He, and his friends, may *now,* if they think fit, explain themselves quite otherwise: I shall not be against it.

4. The author supposes that the presence of the soul is sufficient, to make it perceive what passes in the brain. But this is the very thing which Father

Malebranche, and all the Cartesians deny; and they rightly deny it. More is requisite besides bare presence, to enable one thing to perceive what passes in another. Some communication, that may be explained; some sort of influence, is requisite for this purpose. Space, according to Sir Isaac Newton, is intimately present to the body contained in it, and commensurate with it. Does it follow from thence, that space *perceives* what passes in a body; and *remembers* it, when that body is gone away? Besides, the soul being *indivisible,* it's immediate *presence,* which may be imagined in the body, would only be in *one point.* How then could it perceive what happens *out of* that point? I pretend to be the first, who has shown *how* the soul perceives what passes in the body.

5. The reason why God perceives every thing, is not his bare *presence,* but also his *operation.* 'Tis because he preserves things by an action, which *continually produces* whatever is good and perfect in them. But the *soul* having no immediate *influence* over the *body,* nor the *body* over the *soul,* their mutual correspondence cannot he explained by their being *present* to each other.

6. The true and principal reason why we commend a machine, is rather grounded upon the *effects* of the machine, than upon its *cause.* We don't enquire so much about the *power* of the artist, as we do about his *skill* in his workmanship. And therefore the reason alleged by the author for extolling the machine of God's making, grounded upon his having *made it entirely,* without wanting any materials to make it of; that reason, I say, is not sufficient. 'Tis a mere shift the author has been forced to have recourse to: and the reason why God exceeds any other artist, is *not only* because he makes the *whole,* whereas all other artists must have matter to work upon. This excellency in God, would be *only* on the account of *power.* But God's excellency arises also from *another* cause, *viz*: *wisdom,* whereby his

machine *lasts longer,* and moves *more regularly,* than those of any other artist whatsoever.

He who buys a watch, does not mind whether the *workman* made every part of it *himself,* or whether he got the several parts made by *others,* and did only put them together; provided the watch goes right. And if the workman had received from God even the gift of c*reating* the matter of the wheels; yet the buyer of the watch would not be satisfied, unless the workman had also received the gift of *putting them well together.* In like manner, he who will be pleased with *God's* workmanship, cannot be so, without some *other* reason than that which the author has here alleged.

7. Thus the *skill* of *God* must not be inferior to that of a workman; nay, it must go infinitely beyond it. The bare *production* of every thing, would indeed show the *power* of God; but it would not sufficiently show his *wisdom.* They who maintain the contrary, will fall exactly into the error of the *materialists,* and of *Spinoza,* from whom they profess to differ. They would, in such case, acknowledge *power,* but not sufficient wisdom, in the principle or cause of all things.

8. I do not say, the material world is a machine, or watch, that goes *without* God's *interposition;* and I have sufficiently insisted, that the creation wants to be continually influenced by its *Creator.*

But I maintain it to be a watch, that goes *without* wanting to be *mended* by him: otherwise we must say, that God *bethinks himself again.* No; God has *foreseen* everything; he has provided a remedy for everything *beforehand;* there is in his works a harmony, a beauty, already *pre-established.*

9. This opinion does not exclude God's *Providence,* or his *government* of the world: on the contrary, it makes it *perfect.* A true *Providence* of God, requires a perfect *foresight.* But then it requires moreover, not only that he should have *foreseen* everything; but also that he should have *provided* for everything *beforehand,* with proper remedies: otherwise, he must want

either *wis*dom to *foresee* things, or *power* to *provide* against them. He will be like the God of the *Socinians,* who *lives only from dap to day,* as Mr. *Jurieu* says. Indeed God, according to the *Socinians,* does not so much as *foresee* inconveniences; whereas, the gentlemen I am arguing with, who put him upon *mending* his work, say only, that he *does not provide against* them. But this seems to me to be still a very great *imperfection.* According to this doctrine, God must want either *power,* or *good will.*

10. I don't think I can be rightly blamed, for saying that God is *intelligentia supramundana.* Will they say, that he is *intelligentia mundana;* that is, the *soul of the world?* I hope not. However, they will do well to take care not to fall into that notion unawares.

11. The comparison of a king, under whose reign everything should go on without his interposition, is by no means to the present purpose; since God preserves everything continually, and nothing can subsist without him. His kingdom therefore is not a *nominal* one. 'Tis just as if one should say, that a king, who should originally have taken care to have his subjects so well educated, and should, by his care in providing for their subsistence, preserve them so well in their fitness for their several stations, and in their good affection towards him, as that he should have no occasion ever to be amending anything amongst them; would be only a *nominal* king.

12. To conclude. If God is obliged to mend the course of nature from time to time, it must be done either *super naturally* or *naturally.* If it be done *supernaturally,* we must have recourse to *miracles,* in order to explain natural things: which is reducing an hypothesis *ad absurdum:* for, everything may easily be accounted for by *miracles.* But if it be done *naturally,* then God will not be in*telligentia supramundama*: be will be comprehended under the nature of things; that is, he will be *the soul of the world.*

MR. LEIBNITZ'S THIRD PAPER: Being an Answer to Dr. Clarke's

Second Reply.

1. According to the usual way of speaking, *mathematical* principles concern only *mere mathematics*, viz: numbers, figures, arithmetic, geometry. But *metaphysical* principles concern *more general notions,* such as are cause and effect.

2. The author grants me this important *principle;* that *nothing happens without a sufficient reason, why it should he so, rather than otherwise.* But he grants it only in *words,* and *in reality* denies it. Which shows that he does not fully perceive the strength of it. And therefore he makes use of an influence, which exactly falls in with one of my demonstrations against *real absolute space*, which is an *idol* of some modern *Englishmen.* I call it an *idol,* not in a theological sense, but in a philosophical one; as Chancellor *Bacon* says, that there are *idola tribus, idola specus.*

3. These gentlemen maintain therefore, that *space* is a *real absolute being.* But this involves them in great difficulties; for such a *being* must needs be *eternal* and *infinite.* Hence some have believed it to be *God himself,* or, one of his attributes, his *immensity.* But since space consists of *parts,* it is not a thing which can belong to God.

4. As for my own opinion, I have said more than once, that I hold *space* to be something *merely relative,* as *time* is; that I hold it to be an *order of coexistences,* as *time* is an *order of successions.* For *space* denotes, in terms of possibility, *an order* of things which exist at the same time, considered as existing *together*; without inquiring into their particular manner of existing. And when many things are seen *together,* one perceives *that order of things among themselves.*

5. I have many demonstrations, to confute the fancy of those who take *space to* be a *substance,* or at least an absolute' *being.* But I shall only use, at the present, one demonstration, which the author here gives me occasion to insist upon. I say then, that if *space* was an absolute *being,* there would

something happen, for which it would be impossible there should be a *sufficient reason.*

Which is against my Axiom. And I prove it thus. *Space* is something absolutely *uniform;* and, without the things placed in it, *one point* of space does not absolutely differ in any respect whatsoever from *another point* of space. Now from hence it follows, (supposing space to be something in itself, besides the *order of bodies among themselves*,) that 'tis impossible there should be a *reason,* why God, preserving the same situations of bodies among themselves, should have placed them in space after *one certain particular manner,* and not *otherwise;* why everything was not placed the *quite contrary way*, for instance, by changing *east* into *west.* But if space is nothing else, but that *order* or *relation;* and is nothing at all without bodies, but the possibility of placing them; then those two states, the *one* such as it now is, the *other* supposed to be the quite contrary way, would not at all differ from one another. *Their difference* therefore is only to be found in our *chimerical* supposition of the *reality* of space in itself. But in truth the *one* would exactly be the same thing as the *other,* they being absolutely *indiscernible;* and consequently there is no room to enquire after a reason of the preference of the one to the other.

6. The case is the same with respect to time. Supposing any one should ask, why God did not create everything a year sooner; and the same person should infer from thence, that God has done something, concerning which 'tis not possible there should be a reason, why he did it so, and not otherwise: the answer is, that his inference would be right, if time was any thing distinct from things existing in time. For it would be impossible there should be any reason, why things should be applied to such particular instants, rather than to others, their succession continuing the same. But then the same argument proves, that instants, considered without the things, are nothing at all; and that they consist only in the successive order of

things: which order remaining the same, one of the two states, viz. that of a supposed anticipation, would not at all differ, nor could be discerned from, the *other* which now is.

7. It appears from what I have said, that my axiom has not been well understood; and that the author denies it, tho' he seems to grant it.' Tis true, says he, that there is nothing without a sufficient reason why it is, and why it is thus, rather than otherwise: but he adds, that this sufficient reason, is often the simple or mere will of God: as, when it is asked why matter was not placed otherwise in space; the same situations of bodies among themselves being preserved. But this is plainly maintaining, that God wills something, without any sufficient reason for his will: against the axiom, or the general rule of whatever happens. This is falling back into the *loose indifference*, which I have confuted at large, and showed to be absolutely *chimerical* even in creatures, and contrary to the wisdom of God, as if he could operate without acting by reason.

8. The author objects against me, that if we don't admit this *simple and mere will,* we take away from God the power of *choosing,* and bring in a fatality. But the quite contrary is true. I maintain that God has the power of choosing, since I ground that power upon the *reason of a choice* agreeable to his wisdom. And 'tis not *this fatality,* (which is only the wisest order of Providence) but a *blind fatality* or *necessity,* void of all wisdom and choice, which we ought to avoid.

9. I had observed, that by lessening the quantity of matter, the quantity of objects, upon which God may exercise his goodness, will be lessen'd. The author answers, that instead of matter, there are other things in the void space, on which God may exercise his goodness. Be it so: tho' I don't grant it; for I hold that every created substance is attended with matter. However, let it be so: I answer, that more matter was consistent with those same things; and consequently the said objects will be still lessened. The instance

of a greater number of *men,* or *animals,* is not to the purpose; for they would *fill up* place, in exclusion of other things.

10. It will be difficult to make me believe, that *sensorium* does not, in its *usual* meaning, signify an *organ* of sensation.

11. The *mere presence* of a substance, even an animated one, is not sufficient for perception. A blind man, and even a man whose thoughts are wandering, does not *see.* The author must explain, how the soul perceives what is *without* itself.

12. God is not present to things by *situation,* but by *essence:* his presence is manifested by his immediate *operation.* The presence of the *soul* is quite of another nature. To say that it is diffused all over the body, is to make it extended and divisible. To say it is, the whole of it, in every part of the body, is to make it divided from itself. To fix it to a *point,* to diffuse it all over *many points,* are only abusive expressions, *idola tribus.*

13. If *active force* should *diminish* in the universe, by the natural laws which God has established; so that there should be need for him to give a *new impression* in order to restore that force, like an artist's mending the imperfections of his machine; the disorder would not only be with respect to *us,* but also with respect to *God himself.* He *might have* prevented it, and taken better measures to avoid such an inconvenience: and therefore, indeed, he has *actually* done it.

14. When I said that God has provided remedies beforehand against such disorders, I did not say that God suffers disorders to happen, and then finds remedies for them; but that he has found a way beforehand to prevent any disorders happening.

15. The author strives in vain to criticize my expression, that God is *intelligentia supramundana.* To say that God is above the world, is not denying that he is in the world.

16. I never gave any occasion to doubt, but that God's conservation is an actual preservation and continuation of the beings, powers, orders, dispositions, and motions of all things: and I think I have perhaps explained it better than many others. But, says the author, *this is all that I contended for.* To this I answer; *your humble servant for that, sir.* Our dispute consists in many other things. The question is, whether God does not act in the most *regular* and most *perfect* manner? whether his machine is liable to *disorder,* which he is obliged to mend by extraordinary means? whether the will of God can act *without reason?* whether space is an *absolute being?* also concerning the nature of *miracles;* and many such things, which make a wide difference between us.

17. Divines will not grant the author's position against me, viz. that there is no difference, with respect to *God,* between *natural* and *supernatural:* and it will be still less approved by most *philosophers.* There is a vast difference between these two things; but it plainly appears, it has not been duly consider'd. That which is *supernatural* exceeds *all the powers of creatures.* I shall give an instance, which I have often made use of with good success. If God would cause a body to move free in the *aether* round about a certain fixed center, without any other creature acting upon it: I say, it could not be done without a *miracle;* since it cannot be explained by the nature of bodies. For, a free body does naturally recede from a curve in the tangent. And therefore I maintain, that the *attraction* of bodies, properly so called, is a *miraculous* thing, since it cannot be explained by the nature of bodies.

MR. LEIBNITZ'S FOURTH PAPER; BEING AN ANSWER TO DR. CLARKE'S

Third Reply.

1. IN THINGS *absolutely indifferent*, there is no [foundation for] choice; and consequently no election, nor will; since choice must he founded on some *reason*, or principle.

2. *A mere wid* without any motive, is a fiction, not only contrary to God's perfection, but also chimerical and contradictory; inconsistent with the definition of the *will*, and sufficiently confuted in my *Theodicaea.*

3. 'Tis a thing *indifferent,* to place three bodies, equal and perfectly alike, in any order whatsoever; and consequently they will *never be placed in any order*, by him who does nothing without wisdom. But then, he being the author of things, no such things will be *produced by him* at all; and consequently there *are no such things* in nature.

4. There is no such thing as two individuals *indiscernible* from each other. An ingenious gentleman of my acquaintance, discoursing with me, in the presence of her *Electoral Highness the Princess* Sophia, in the garden of *Herrenhausen*, thought he could find two leaves perfectly alike. The princess defied him to do it, and he ran all over the garden a long time to look for some; but it was to no purpose. Two drops of water, or milk, viewed with a microscope, will appear distinguishable from, each other. This is an argument against *atoms;* which are confuted, as well as a *vacuum,* by the principles of true metaphysics.

5. Those great principles of' a *sufficient reason,* and of the *identity of indiscernibles,* change the state of metaphysics. That science becomes real

and demonstrative by means of these principles; whereas before, it did generally consist in empty words.

6. To suppose *two* things *indiscernible,* is to suppose the *same thing* under *two names.* And therefore to suppose that the universe could have had at first *another* position of *time* and *place*, than that which it actually had; and yet that all the parts of the universe should have had the same situation among themselves, as that which they actually had; such a supposition, I say, is an *impossible* fiction.

7. The same reason, which shows that *extramundane* space is *imaginary*, proves that *all empty space* is an *imaginary* thing; for they differ only as greater and less.

8. If *space* is a *property* or attribute, it must be the property of some *substance.* But *what substance* will that *bounded* empty space he an affection or property of, which the persons I am arguing with, suppose to be between two bodies?

9. If *infinite space* is *immensity, finite space* will be the opposite to immensity, that is, 'twill be *mensurability,* or *limited extension. N*ow extension must be the affection of some thing extended. But if that space be empty, it will be an attribute *without a subject,* an extension without any thing extended. Wherefore by making space a *property,* the author falls in with my opinion, which makes it an order of things, and not any thing absolute.

10. If space is an absolute *reality;* far from being a *property* or an accident opposed to substance, it will have a *greater reality* than *substances* themselves. God cannot destroy it, nor even change it in any respect. It will be not only immense in the whole, but also *immutable* and *eternal* in every part. There will be an infinite number of eternal things *besides God.*

11. To say that *infinite space* has no *parts,* is to say that it does not consist of *finite* spaces; and that infinite space might subsist, though all

finite space should be reduced to nothing. It would be, as if one should say, in the *Cartesian* supposition of a material extended unlimited world, that such a world might subsist, though all the bodies of which it consists, should be reduced to nothing.

12. The author ascribes parts to space, p. 19 of the 3d edition of his Defense of the Argument against Mr. Dodwell; and makes them inseparable one from another. But, p. *30 of his Second Defense,* he says they are *parts improperly so-called:* which may be understood in a good sense.

13. To say that God can cause the whole universe to move forward in a right line, or in any other line, without making otherwise any alteration in it, is another chimerical supposition. For, two states indiscernible from each other, are the same state; and consequently, 'tis a change without any change. Besides, there is neither rhyme nor reason in it. But God does nothing without reason; and 'tis impossible there should he any here. Besides, it would be *agendo nihil agere,* as I have just now said, because of the indiscernibility.

14. These are *idola tribus,* mere chimeras, and superficial imaginations. All this is only grounded upon the supposition, that Imaginary space is real.

15. It is a like fiction, (that is) an *impossible* one, to suppose that God might have created the world some millions of years sooner. They who run into such kind of fictions, can give no answer to one that should argue for the *eternity* of the world. For since God does nothing without reason, and no reason can be given why he did not create the world sooner; it will follow, either that he has created nothing at all, or that he created the world before any assignable time, that is, that the world is *eternal.* But when once, it has been shown, that the beginning, *whenever* it was, is always th*e same thing;* the question, why it was not otherwise ordered, becomes needless and insignificant.

16. If *space* and *time* were anything absolute, that is, if they were anything else, besides certain *orders* of things; then indeed my assertion would be a *contradiction.* But since it is not so, the hypothesis *[that space and time are anything absolute*] is contradictory, that is, 'tis an *impossible* fiction.

17. And the case is the same as in *geometry;* where by the very supposition that a figure *is* greater than it really is, we sometimes prove that it *is not* greater. This indeed is a *contradiction;* but it lies in the hypothesis, which appears to be false for that very reason.

18. Space being *uniform,* there can be neither any *external* nor *internal* reason, by which to distinguish its parts, and to make any choice among them. For, any *external* reason to discern between them, can only be grounded upon some *internal* one. Otherwise we should discern what is indiscernible, or choose' without discerning. A will without reason, would be the *chance* of the *Epicureans.* A God, who should act by such a will, would be a God only in name. The cause of these errors proceeds from want of care to avoid what derogates from the divine perfections.

19. When *two* things which cannot both be together, are *equally good;* and neither in themselves, nor by their combination with other things, has the one any advantage over the other; God will produce *neither of them.*

20. God is never determined by *external* things, but always by what is *in himself;* that is, by his knowledge of things, before any thing exists *without* himself.

21. There is no *possible* reason, that *can limit* the quantity of matter; and therefore such limitation can have no place.

22. And supposing an arbitrary limitation of the quantity of matter, something might always be added to it without derogating from the perfection of those things which do already exist; and consequently

something must always be added, in order to act according to the principle of the perfection of the divine operations.

23. And therefore it cannot be said, that the present quantity of matter is the fittest for the present constitution of things. And supposing it were, it would follow that this present constitution of things would not be the fittest absolutely, if it hinders God from using more matter. It were therefore better to choose another constitution of things, capable of something more.

21. I should be glad to see a passage of any philosopher, who takes *sensorium* in any other sense than *Goclenius* does.

25. If Scapula says that sensorium is the *place* in which the understanding resides, he means by it the *organ* of internal sensation. And therefore he does not differ from G*oclenius.*

26. *Sensorium* has always signified the *organ,* of sensation. The *glandula penealis* would be, according to *Cartesius,* the *sensorium*, in the above-mentioned sense of *Scapula.*

27. There is hardly any expression less proper upon this subject, than that which makes God to have a sensorium. It seems to make God the *soul of the world.* And it will be a hard matter to put a justifiable sense upon this word, according to the use Sir *Isaac Newton* makes of it.

28. Though the question be about the sense put upon that word by Sir *Isaac Newton*, and not by *Goclenius;* yet I am not to blame for quoting the philosophical dictionary of that author, because the design of dictionaries is to show the use of words.

29. God perceives things in himself. Space is the place of *things,* and not the place of God's *ideas:* unless we look upon space as something that makes an union between God and things, in imitation of the imagined union between the soul and the body; which would still make God the *soul of the world.*

30. And indeed the author is much in the wrong, when he compares *God's* knowledge and operation, with the knowledge and operation of *souls.* The *soul* knows things, because God has put into it a *principle representative* of *things without.* But *God* knows things, because he *produces* them continually.

31. The soul does not *act* upon things, according to my opinion, any otherwise than because the body adapts itself to the desires of the soul, by virtue of the *harmony,* which God has *pre-established* between them.

32. But they who fancy that the soul can give a *new force* to the body; and that God does the same in the world, in order to mend the imperfections of his machine; make God too much like the soul, by ascribing too much to the soul, and too little to God.

33. For, none but God can give a *new force* to nature; and *he* does it only *supernaturally.* If there was need for him to do it in the *natural* course of things; he would have made a very imperfect work. At that rate, *he* would be with respect to the *world,* what the *soul,* in the vulgar notion, is with respect to the body.

34. Those who undertake to defend the vulgar opinion concerning the soul's *influence* over the body, by instancing in God's operating on things external; make God still too much like a soul of the world. To which I add, that the author's affecting to find fault with the words, *intelligentia supramundana,* seems also to incline that way.

35. The images, with which the soul is immediately affected, are within itself; but they correspond to those of the body. The presence of the soul is imperfect, and can only be explained by that correspondence. But the presence of God is perfect, and manifested by his operation.

36. The author wrongly supposes against me, that the presence Of the soul is connected with its *influence* over the body; for he knows, I reject that *influence.*

37. The soul's being *diffused through the brain,* is no less inexplicable, than its being diffused through the whole body. The difference is only in *more* and *less.*

38. They who fancy that *active force* lessens of itself in the world, do not well understand the principal laws of nature, and the beauty of the works of God.

39. How will they he able to prove, that this *defect* is a consequence of the dependence of things?

40. The imperfection of our machines, which is the reason why they want to be mended, proceeds from this very thing, that they do not sufficiently depend upon the workman. And therefore the dependence of nature upon God, far from being the cause of such an imperfection, is rather the reason why there is no such imperfection in nature, because it depends so much upon an artist, who is too perfect to make a work that wants to be mended. 'Tis true that every particular machine of nature, is, in some measure, liable to be disordered; but not the whole *universe*, which *cannot diminish in perfection.*

41. The author contends, that *space* does not depend upon the *situation* of *bodies.* I answer: 'Tis true, it does not depend upon *such* or *such* a situation of bodies; but it is *that order*, which renders bodies capable of being situated, and by which they have a situation among themselves when they *exist together;* as *time* is *that order*, with respect to their *successive* position. But if there were no creatures, space and time would be only in the ideas of God.

42. The author seems to acknowledge here, that his notion of a miracle is not the same with that which divines and philosophers *usually* have. It is therefore sufficient for my purpose, that my adversaries are obliged to have recourse to what is *commonly called* a miracle.

43. I am afraid the author, by altering the sense *commonly put upon* the word *miracle*, will fall into an inconvenient opinion. The nature of a miracle does not at all consist in *usefulness* or *unusefulness;* for then *monsters* would be *miracles.*

". There are *miracles* of an *inferior* sort, which an *angel* can work. He can, for instance, make a man walk upon the water without sinking. But there are miracles, which none but God can work; they exceeding all natural powers. Of which kind, are *creating* and *annihilating.*

45. 'Tis also a supernatural thing, that bodies should *attract* one another at a distance, without any intermediate means; and that a body should move around, without receding in the tangent, though nothing hinder it from so receding. For these effects cannot be explained by the nature of things.

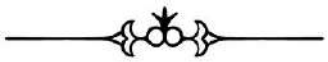
46. Why should it be impossible to explain the motion of animals by *natural* forces? Though indeed, the *beginning* of animals is no less inexplicable by natural forces, than the beginning of the world.

P. S. — All those who maintain a *vacuum,* are more influenced by imagination than by reason. When I was a young man, I also gave in to the notion of a *vacuum* and *atoms;* but reason brought me into the right way. It was a pleasing imagination. Men carry their inquiries no farther than those two things: they (as it were) nail down their thoughts to them: they fancy, they have found out the first elements of things, a *non plus ultra.* We would have nature to go no farther; and to be finite, as our minds are: but this is being ignorant of the greatness and majesty of the author of things. The least corpuscle is actually subdivided *in infinitum,* and contains, a world of other creatures, which would be wanting in the universe, if that corpuscle was an *atom,* that is, a body of one entire piece without subdivision. In like manner, to admit a *vacuum* in nature, is ascribing to God a very imperfect work: 'tis violating the grand principle of the necessity of a *sufficient reason;* which many have talked of, without understanding its true meaning;

as I have lately shown, in proving, by that principle, that *space* is only an *order* of things, as *time* also is, and not at all an absolute being. To omit many other arguments against a *vacuum* and *atoms,* I shall here mention those which I ground upon *God's perfection,* and upon the *necessity of a sufficient reason.* I lay it down as a principle, that every perfection, which God *could* impart to things without, derogating from their other perfections, has actually been imparted to them. Now, let us fancy a *space* wholly empty. God *could* have placed some matter in it, without derogating in any respect from all other things: therefore he hath actually placed some matter in that space: therefore, there is no space wholly *empty:* therefore all is full. The same argument proves that there is no corpuscle, but what is subdivided. I shall add another argument, grounded upon the necessity of a *sufficient reason.* 'Tis *impossible* there should be any principle to determine what proportion of matter there ought to be, out of all the possible degrees from a *plenum* to a *vacuum,* or from a *vacuum* to a *plenum.* Perhaps it will be said, that the one should be equal to the other: but, because matter is more perfect than a *vacuum,* reason requires that a geometrical proportion should be observed, and that there should be as much more matter than *vacuum,* as the former deserves to have the preference before the latter. But then there must be *no vacuum* at all; for the perfection of matter is to that of a *vacuum*, as *something* to *nothing.* And the case is the same with *atoms:* What reason can any one assign for *confining* nature in the progression of subdivision? These are fictions merely arbitrary, and unworthy of true philosophy. The reasons alleged for a *vacuum,* are mere sophisms.

MR. LEIBNITZ'S FIFTH PAPER: BEING AN ANSWER TO DR. CLARKE'S

Fourth Reply.



To § 1 and 2, of the foregoing paper [Clarke's Fourth Reply.]

1. I shall at this time make a *larger* answer; to clear the difficulties; and to try whether the author be willing to hearken to reason, and to show that he is a lover of truth; or whether he will only cavil, without clearing anything.

2. He often endeavors to impute to me *necessity and fatality;* though perhaps no one has better and more fully explained, than I have done in my *Theodicaea,* the true difference between *liberty, contingency, spontaneity,* on the one side; and absolute *necessity, chance*, *coaction,* on the other. I know not yet, whether the author does this, because he *will* do it, whatever I may say; or whether he does it, (supposing him sincere in those imputations,) because he has *not yet* duly *considered* my opinions. I shall soon find what I am to think of it, and I shall take my measures accordingly.

3. It is true, that *reason* in the *mind* of a wise being, and *motives* in any mind whatsoever, do that which answers to the effect produced by *weights* in a *balance.* The author objects, that this notion leads to *necessity* and *fatality.* But he says so, without proving it, and without taking notice of the explications I have formerly given, in order to remove the difficulties that may be raised upon that head.

4. He seems also to play with *equivocal* terms. There are *necessities,* which ought to be admitted. For we must distinguish between an *absolute* and an *hypothetical necessity.* We must also distinguish between a *necessity,* which takes place because the opposite implies a contradiction; (which

necessity is called *logical, metaphysical,* or *mathematical;)* and a *necessity* which is *moral,* whereby a wise being chooses the best, and every mind follows the strongest inclination.

5. *Hypothetical necessity* is that, which the supposition or *hypothesis* of God's *foresight* and *pre-ordination* lays upon *future contingents.* And this must needs be admitted, unless we deny, as the *Socinians* do, God's *foreknowledge of future contingents,* and his *providence* which regulates and governs every particular thing.

6. But neither that *foreknowledge,* nor that *pre-ordination,* derogate from *liberty.* For God, being moved by his supreme reason to choose, among many series of things or worlds possible, that, in which free creatures should take such or such resolutions, though not without his concourse; has thereby rendered every event certain and determined once for all; without derogating thereby from the liberty of those creatures: that simple decree of choice, not at all changing, but only *actualizing* their free natures, which he saw in his ideas.

7. As for moral necessity, this also does not derogate from liberty. For when a wise being, and especially God, who has supreme wisdom, chooses what is best, he is not the less free upon that account: on the contrary, it is the most perfect liberty, not to be hindered, from acting in the best manner. And when any other chooses according to the most apparent and the most strongly inclining good,, he imitates therein the liberty of a truly wise being, in proportion to his disposition. Without this, the choice would be a blind chance.

8. But good, either true or apparent; in a word, the motive, inclines without necessitating; that is, without imposing an *absolute necessity.* For when God (for instance,) chooses the best; what he does not choose, and is inferior in perfection, is nevertheless possible. But if what he chooses, was absolutely necessary; any other way would be impossible: which is against

the hypothesis. For God chooses among possibles, that is, among many ways, none of which implies a contradiction.

9. But to say, that God can only choose what is *best;* and to infer from thence, that what he does not choose, is impossible; this, I say, is confounding of terms: 'tis blending *power* and *will, metaphysical necessity* and *moral necessity*, *essences* and *existences*. For what is *necessary*, is so by its essence, since the opposite implies a contradiction; but a contingent which exists, owes its existence to the *principle of what is best,* which is a *sufficient reason* for the existence of things. And therefore I say, that motives incline without necessitating; and that there is a certainty and infallibility, but not an absolute necessity in contingent things. Add to this, what will be said hereafter, *Nos.* 73 *and* 76.

10. And I have sufficiently shown in my Theodicaea, that this moral necessity is a good thing, agreeable to the divine perfection agreeable to the great principle or ground of existences, which is that of the want of a sufficient reason: whereas absolute and metaphysical necessity, depends upon the other great principle of our reasonings, vis. that of *essences;* that is, the principle of identity or contradiction: for what is absolutely necessary, is the only possible way, and its contrary implies a contradiction.

11. I have also shown, that our *will* does *not* always exactly *follow* the *practical understanding;* because it may have or find *reasons* to *suspend* its resolution till a further examination.

12. To impute to me after this, the notion of an *absolute necessity,* without having anything to say against the *reasons* which I have just now alleged, and which go to the bottom of things, perhaps beyond what is to be seen elsewhere; this, I say, will be an unreasonable obstinacy.

13. As to the notion of fatality, which the author lays also to my charge; this is another ambiguity. There is a fatum Mahometanum, a fatum stoicum, and &c fatum *Christianum.* The *Turkish fate* will have an effect to happen,

even though its cause should be avoided; as if there was an *absolute necessity.* The *Stoical fate* will have a man to be quiet, because he must have patience whether he will or not, since ’tis impossible to resist the course of things. But ’tis agreed, that there is *fatum Christianum,* a *certain destiny* of every thing, regulated by the foreknowledge and providence of God. *Fatum* is derived from *fari;* that is *to pronounce*, to *decree;* and in its right sense, it signifies the decree of providence. And those who submit to it through a knowledge of the divine perfections, whereof the love of God is a consequence; have not only patience, like the heathen philosophers, but are also contented with what is ordained by God, knowing he does every thing for the best; and not only for the greatest good in general, but also for the greatest particular good of those who love him.

14. I have been obliged to enlarge, in order to remove ill-grounded imputations once for all; as I hope I shall he able to do by these explications, so as to satisfy equitable persons. I shall now come to an *objection* raised here, against my comparing the *weights* of a *balance* with the *motives* of the *will.* ’Tis objected, that a *balance* is merely *passive,* and moved by the weights; whereas agents intelligent, and endowed with will, are *active.* To this I answer, that the *principle of the want of a sufficient reason* is common both to *agents* and *patients:* they want a *sufficient reason* of their *action,* as well as of their *passion.* A *balance* does not only not act, when it is equally *pulled* on both sides; but the *equal weights* likewise do not act when they are in an *equilibrium,* so that one of them cannot go down without the other’s rising up as much.

15. It must also he considered, that, properly speaking, motives do not act upon the mind, as weights do upon a balance; but ’tis rather the mind that acts by virtue of the motives, which are *its dispositions* to act. And therefore to pretend, as the author does here, that the mind prefers sometimes weak motives to strong ones, and even that it prefers that which

is *indifferent* before *motives:* this, I say, is to divide the *mind* from the *motives*, as if they were *without the mind*, as the weight is distinct from the balance; and as if the *mind* had, besides *motives,* other *dispositions* to act, by virtue of which it could reject or accept the *motives.* Whereas, in truth, the *motives* comprehend *all the dispositions*, which the mind can have to act voluntarily; for they *include* not only the *reasons,* but also the *inclinations* arising from passions, or other preceding impressions. Wherefore, if the mind should prefer a weak *inclination* to a strong one, it would act against itself, and otherwise than it is disposed to act. Which shows that the author's notions, contrary to mine, are superficial, and appear to have no solidity in them, when they are well considered.

16. To assert also, that the *mind may home good reasons to act*, when it has *no motives,* and *when things are absolutely indifferent,* as the author explains himself here; this, I say, is a manifest contradiction. For if the mind has *good reasons* for taking the *part* it takes, then the things are not *indifferent* to the mind.

17. And to affirm that the mind will act, when it has *reasons* to act, *even though the ways of acting were absolutely indifferent:* this, I say, is to speak again very superficially, and in a manner that cannot he defended. For a man never has a sufficient reason to *act*, when he has not also a sufficient reason to act *in a certain particular manner;* every action being individual, and not general, nor abstract from its circumstances, but always needing some particular way of being put in execution. Wherefore, when there is a sufficient reason to do any particular thing, there is also a sufficient reason to do it in a certain particular manner; and consequently, several manners of doing it are not *indifferent.* As often as a man has sufficient reasons for a single action, he has also sufficient reasons for all its requisites. See also what I shall say below, No. 66.

18. These arguments are very obvious: and ’tis very strange to charge me with advancing my principle of *the want of a sufficient reason,* without any proof drawn either from the nature of things, or from the divine perfections. For the *nature of things* requires, that every event should have beforehand its proper conditions, requisites, and dispositions, the existence whereof makes the sufficient reason of such event.

19. And *God’s perfection* requires, that all his actions should be agreeable to his wisdom; and that it may not be said of him, that he has acted without reason; or even that he has preferred a weaker reason before a stronger.

20. But I shall speak more largely at the conclusion of this paper, concerning the solidity and importance of this great principle, of the *want of a sufficient reason* in order to every event; the overthrowing of which principle, would overthrow the best part of all philosophy. ’Tis therefore very strange that the author should say, I am herein guilty of a *petitio principii;* and it plainly appears he is desirous to maintain indefensible opinions, since he is reduced to deny that great principle, which is one of the most essential principles of reason.

To § 3 and 4.

21. It must be confessed, that though this great principle has been acknowledged, yet it has not been sufficiently made use of. Which is, in great measure, the reason why the *prima philosophia* has not been hitherto so fruitful and demonstrative, as it should have been. I infer from that principle, among other consequences, that there are not in nature *two* real, absolute beings, *indiscernible* from each other; because if there were, God and nature would act without reason, in ordering the one otherwise than the other; and that therefore God does not produce *two* pieces of matter perfectly *equal* and *alike.* The author answers this conclusion, without

confuting the reason of it; and he answers with a very weak objection. *That argument*, says he, *if it was good, would prove that it would be impossible for God to create any matter at all. For, the perfectly solid parts of matter, if we take them of equal figure and dimensions, (which is always possible in supposition*), *would, be exactly alike.* But 'tis a manifest *petitio principii* to suppose *that perfect likeness,* which, according to me, cannot be admitted. This supposition of two i*ndiscernibles,* such as two pieces of matter perfectly alike, seems indeed to be *possible* in abstract terms; but it is not consistent with the order of things, nor with the divine wisdom, by which nothing is admitted without reason. The vulgar fancy such things, because they content themselves with incomplete notions. And this is one of the faults of the *atomists.*

22. Besides; I don't admit in matter, parts perfectly *solid,* or that are the same throughout, without any variety or particular *motion* in their parts, as the pretended atoms are imagined to be. To suppose such bodies, is another popular opinion ill-grounded. According to my demonstrations, every part of matter is *actually* subdivided into parts differently *moved,* and no one of them is perfectly *like* another.

23. I said, that in sensible things, *two,* that are *indiscernible* from each other, can never be found; that (for instance) two *leaves* in a garden, or two *drops* of water, perfectly alike, are not to be found. The author acknowledges it as to *leaves,* and *perhaps* as to *drops* of water. But he might have admitted it, without any hesitation, without a *perhaps,* (an *Italian* would say, *senza forse,)* as to *drops* of water likewise.

24. I believe that these general observations in things sensible hold also in proportion in things insensible, and that one may say, in this respect, what harlequin says in the Emperor of the Moon; His there, just as 'tis here. And 'tis a great objection against indiscernables, that no instance of them is to be found. But the author opposes this consequence, because (says he)

sensible bodies are compounded; whereas he maintains there are insensible bodies which are simple. I answer again that I don't admit simple bodies. There is nothing simple, in my opinion, but true monads, which have neither parts nor extension. Simple bodies, and even perfectly similar ones, are a consequence of the false hypothesis of a vacuum and of atoms, or of lazy philosophy, which does not sufficiently carry on the analysis of things, and fancies it can attain to the first material elements of nature, because our imagination would be therewith satisfied.

25. When I deny that there are two drops of water perfectly alike, or any two other bodies *indiscernible* from each other; I don't say, 'tis absolutely *impossible to* suppose them; but that 'tie a thing contrary to the divine *wisdom,* and which consequently does not exist.

To § 5 and 6.

26. I own, that if two things perfectly *indiscernible* from each other did exist, they would be *two;* but that supposition is false, and contrary to the grand principle of reason. The vulgar philosophers were mistaken, when they believed that there are things different *solo numero,* or only because they are *two;* and from this error have arisen their perplexities about what they called *the principle of individuation.* Metaphysics have generally been handled like a science of mere *words,* like a philosophical dictionary, without entering into the discussion of *things.* Superficial philosophy, such as is that of the *atomists* and *vacuists,* forges things, which superior reasons do not admit. I hope my demonstrations will change the face of philosophy, notwithstanding such weak objections as the author raises here against me.

27. The *parts* of *time* or *place*, considered *in themselves,* are *ideal* things; and therefore they perfectly resemble one another, like to *abstract units.* But it is not so with two *concrete ones,* or with two *real times,* or two *spaces filled up,* that is, truly *actual.*

28. I don’t say that two points of space are one and the same point, nor that two instants of time are one and the same instant, as the author seems to charge me with saying. But a man may fancy, for want of knowledge, that there are two different instants, where there is but one: in like manner as I observed in the 17th paragraph of the foregoing answer, that frequently in geometry we suppose two, in order to represent the error of a gainsayer, when there is really but one. If any man should suppose that a right line cuts another in two points; it will be found after all, that those *two* pretended points must coincide, and make but *one* point.

29. I have demonstrated, that *space* is nothing else but an *order* of the existence of things, observed as existing together; and therefore the fiction of a material finite universe, moving forward in an infinite empty space, cannot he admitted. It is altogether unreasonable and *impracticable.* For, besides that there is *no real space* out of the material universe; such an action would be without any design in it: it would be working without doing anything, *agendo nihil agere.* There would happen *no change,* which could be observed by any person whatsoever. These are imaginations of *philosophers who have incomplete notions,* who make space an absolute reality. Mere mathematicians, who are only taken up with the conceits of imagination, are apt to forge such notions; but they are destroyed by superior reasons.

30. Absolutely speaking, it appears that God *can* make the material universe *finite* in extension; but the contrary appears more agreeable to his wisdom.

31. I don’t grant, that *every finite* is *movable.* According to the hypothesis of my adversaries themselves, a *part* of *space,* though fi*nite,* is not movable. What is movable, must be capable of changing its situation with respect to *something else,* and to be in a new state *discernible* from the first: otherwise the change is but a fiction. A *movable finite,* must therefore

make part of an*other* finite, that any change may happen which can be *observed.*

32. *Cartesius* maintains, that *matter* is *unlimited;* and I *don't* think he has been sufficiently *confuted.* And though this be granted him, yet it does not follow that matter would be *necessary,* nor that it would have existed from all *eternity;* since that unlimited diffusion of matter, would only be an effect of God's *choice* judging that to be the better.

To § 7.

33. Since *space* in itself is an *ideal* thing, like *time;* space *out of the world* must needs be imaginary, as the *schoolmen* themselves have acknowledged. The case is the same with empty space *within* the world; which I take also to be imaginary, for the reasons before alleged.

34. The author objects against me the vacuum discovered by Mr. Guerike of Magdeburg, which is made by pumping the air out of a receiver; and he pretends that there is truly a perfect vacuum, ora space without matter (at least in part), in that receiver. The Aristotelians and Cartesians, who do not admit a true vacuum, have said in answer to that experiment of Mr. Guerike, as well as to that of Torricellius of Florence (who emptied the air out of a glass-tube by the help of quicksilver), that there is no vacuum at all in the tube or in the receiver: since glass has small pores, which the beams of light, the *effluvia* of the loadstone, and other very thin fluids may go through. I am of their opinion: and I think the receiver may be compared to a box full of holes in the water, having fish or other gross bodies shut up in it; which being taken out, their place would nevertheless be filled up with water. There is only this difference; that though water be fluid and more yielding than those gross bodies, yet it is as heavy and massive, if not more, than they: whereas the matter which gets into the receiver in the room of the air, is much more subtile. The new sticklers for a *vacuum* allege in answer

to this instance, that it is not the *grossness* of matter, but its mere *quantity,* that makes resistance; and consequently that there is of necessity *more vacuum,* where there is *less resistance.* They add, that the *subtileness* of matters has nothing to do here; and that the particles of *quicksilver* are as *subtile* and *fine* as those of *water* and yet that *quicksilver* resists above *ten times more.* To this I reply, that it is not so much the *quantity* of matter, as its *difficulty of giving place,* that makes *resistance.* For instance; *floating timber* contains *less* of heavy matter, than an equal bulk of *water* does; and yet it makes *more resistance* to a boat, than the water does.

35. And as for *quicksilver;* 'tis true, it contains about fourteen times more of *heavy* matter, than an equal bulk of *water* does; but it does not follow, that it contains fourteen times more matter absolutely. On the contrary, *water* contains as much matter; if we include both its own matter, which is heavy; and the extraneous matter void of heaviness, which passes through its pores. For, both *quicksilver* and *water,* are masses of heavy matter, full of pores, through which there passes a great deal of matter void of heaviness [and which does not sensibly resist]; such as is probably that of' the rays of light, and other insensible fluids; and especially that which is itself the cause of the gravity of gross bodies, by receding from the center towards which it drives those bodies. For, it is a strange imagination to make all matter gravitate, and that towards, all other matter, as if each body did equally *attract* every other body according to their masses and distances'; and this by an *attraction* properly so called, which is not derived from an occult impulse of bodies: whereas the gravity of sensible bodies towards the center of the earth, ought to be produced by the motion of some fluid. And the case must be the same with other gravities, such as is that of the planets towards the sun or towards each other. [A body is never moved naturally except by another body which impels it by touching it; and

afterwards it advances until it is stopped by another body which touches it. Every other operation on bodies is either miraculous or imaginary.]

To § 8 and 9.

36. I objected, that space, taken for something real and absolute without bodies, would be a thing eternal, impassible, and independent upon God.. The author endeavors to elude this difficulty, by saying that space is a property of God. In answer to this, I have said, in my foregoing paper, that the property of God is *immensity*; but that *space* (which is often commensurate with bodies), and God's immensity, are not the same thing.

37. I objected further, that if space be a property, and *infinite space* be the *immensity* of *God; finite space* will be the *extension* or *mensurdbility* of something *finite.* And therefore the *space* taken up by *a, body,* will be the *extension of that body.* Which is an absurdity; since a body can change *space,* but cannot leave its *extension.*

38. I asked also: if space is a *property,* what thing will an empty *limited space,* (such as that which my adversary imagines in an exhausted receiver), be the property of? It does not appear reasonable to say, that this empty space either round or square, is a property of God. Will it be then perhaps the property of some immaterial, extended, imaginary substances, which the author seems to fancy in the imaginary spaces?

39. If space is the property or affection of the substance, which is in space; the *same space* will be sometimes the *affection* of *one body,* sometimes of *(mother body,* sometimes of an *immaterial* substance, and sometimes perhaps of *God* himself, when it is void of all other substance material or immaterial. But this is a strange property or *affection,* which *passes from one subject to another.* Thus subjects will leave off their accidents, like clothes; that other subjects may put them on. At this rate, how shall we distinguish accidents and substances?

40. And if *limited spaces* are the *affections* of *limited, substances,* which are in them; and *infinite space* be a property of *God*; a property of God must (which is very strange), be made up of the affections of creatures; for all finite spaces taken together make up infinite space.

41. But if the author denies, that *limited space* is an *affection* of *limited things;* it will not be reasonable neither, that *infinite space* should be the *affection* or property of an *infinite thing.* I have suggested all these difficulties in my foregoing paper; but it does not appear that the author has endeavored to answer them.

42. I have still other reasons against this strange imagination, that space is a property of God. If it be so, space belongs to the *essence* of God. But space has *parts:* therefore there would be *parts* in the *essence* of God. *Spectatum admissi.*

43. Moreover, spaces are sometimes empty, and sometimes filled up. Therefore there will be in the essence of God, parts sometimes empty and sometimes full, and consequently liable to a perpetual *change.* Bodies, filling up space, would fill up part of God's essence, and would be commensurate with it; and in the supposition of a *vacuum,* part of God's essence will be within the *receiver.* Such a *God having parts,* will very much resemble the *Stoic's* God, which was the whole universe considered as a divine animal.

". If infinite *space* is God's *immensity,* infinite *time* will be God's *eternity;* and therefore we must say, that what is in space, is in God's immensity, and consequently in his essence; and that what is in time, is also in the essence of God. *Strange* expressions; which plainly show, that the author makes a wrong use of terms.

45. I shall give another instance of this. God's immensity makes him actually present in all spaces. But now if God is *in* space, how can it be said that space is *in* God, or that it is a property of God? We have often heard,

that a property is in its subject; but we never heard, that a subject is in its property. In like manner, God exists *in* all time. How then can time be in God; and how can it be a property of God? These are perpetual *alloglossies.*

46. It appears that the author confounds immensity, or the *extension of things*, with the *space* according to which that extension is taken. Infinite space is not the immensity of God; finite space is not the extension of bodies: as time is not their duration. Things keep their, extension, but they do not always keep their space. Everything has its own extension, its own duration; but it has not its own time, and does not keep its own space.

47. I will here show, how men come to form to themselves the notion of space. They consider that many things exist at once, and they observe in them a certain order of co-existence, according to which the relation of one thing to another is more or less simple. This order is their situation or distance. When it happens that one of those co-existent things changes its relation to a multitude "of others, which do not change their relation among themselves; and that another thing, newly come, acquires the same relation to the others, as the former had; we then say it is come into the place of the former; and this change, we call a motion in that body, wherein is the immediate cause of the change. And though many, or even all the co-existent things, should change according to certain known rules of direction and swiftness; yet one may always determine the relation of situation, which every co-existent acquires with respect to every other co-existent; and even that relation, which any other co-existent would have to this, or which this would have to any other, if it had not changed, or if it had changed any otherwise. And supposing, or feigning, that among those co-existents, there is a sufficient number of them, which have undergone no change; then we may say, that those which have such a relation to those fixed existents, as others had to them before, have now the same place which those others had. And that which comprehends all those places, is

called space. Which shows, that in order to have an idea of place, and consequently of space, it is sufficient to consider these relations, and the rules of their changes, without needing to fancy any absolute reality out of the things whose situation we consider, and, to give a kind of definition: place is that, which we say is the same to A, and to B, when the relation of the existence of B, with C, E, F, G, &c. agrees perfectly with the relation of the co-existence, which A had with the same C, E, E, G, disc. supposing there has been no cause of change in C, E, F, G, &c. It might be said also, without entering into any further particularity, that place is that, which is the same in different moments to different existent things, when their relations of co-existence with certain other existents, which are supposed to continue fixed from one of those moments to the other, agree entirely together. And fixed existents are those, in which there has been no cause of any change of the order of their co-existence with others; or (which is the same thing), in which there has been no motion. Lastly, *space* is that which results from *places taken together.* And here it may not be amiss to consider the difference between *place*, and the *relation of situation*, which is in the body that fills up the place. For, the *place* of *A* and *B*, is the *same*; whereas the *relation* of *A* to fixed bodies, is not precisely and individually the *same*, as the relation which *B* (that comes into its place) will have to the same fixed bodies; but these relations *agree* only. For two different subjects, as *A* and *B,* cannot have precisely the *same* individual affection; it being impossible, that the same individual accident should be in two subjects, or pass from one subject to another. But the mind not contented with an agreement, looks for an identity, for something that should be truly the same; and conceives it as being extrinsic to the subject: and this is what we here call *place* and *space.* But this can only be an ideal thing; containing a certain *order*, wherein the mind conceives the application of relations. In like manner, as the mind can fancy to itself an *order* made up of *genealogical lines*, whose

bigness would consist only in the number of generations, wherein every person would have his place: and if to this one should add the fiction of a *metempsychosis,* and bring in the *same* human souls again; the persons in those lines might change place; he who was a father, or a grand-father, might become a son, or a grand-son, &c. And yet those genealogical *places*, *lines*, and *spaces*, though they should express real truths, would only be ideal things. I shall allege another example, to show how the mind uses, upon occasion of accidents which are *in* subjects, to fancy to itself something answerable to those accidents, *out of* the subjects. The *ratio* or *proportion* between two lines *L* and *M,* may be conceived three several ways; as a *ratio* of the greater *L* to the lesser *M*; as a ratio of the lesser *M* to the greater *L*; and lastly, as something abstracted from both, that is, as the *ratio* between *L* and *M,* without considering which is the antecedent, or which the consequent; which the subject, and which the object. And thus it is, that proportions are considered in music. In the first way of considering them, *L* the greater; in the second, *M* the lesser, is the subject of that accident, which philosophers call *relation.* But, which of them will be the subject, in the third way of considering them? It cannot be said that both of them, *L* and *M* together, are the subject of such an accident; for if so, we should have an accident in two subjects, with one leg in one, and the other in the other; which is contrary to the notion of accidents. Therefore we must say that this relation, in this third way of considering it, is indeed *out of* the subjects; but being neither a substance, nor an accident, it must be a mere ideal thing, the consideration of which is nevertheless useful. To conclude: I have here done much like *Euclid,* who not being able to make his readers well understand what *ratio* is absolutely in the sense of geometricians; defines what are the *same ratios.* Thus, in like manner, in order to explain what *place* is, I have been content to define what is the *same place.* Lastly; I observe, that the traces of movable bodies, which they leave sometimes

upon the immovable ones on which they are moved; have given men occasion to form in their imagination such an idea, as if some trace did still remain, even when there is nothing unmoved. But this is a mere ideal thing, and imports only, that *if there was any unmoved thing there*, *the trace might be marked out upon it.* And 'tis this analogy, which makes men fancy *places*, *traces* and *spaces;* though those things consist only in the truth of *relations*, and not at all in any absolute reality.

48. To conclude. If the space (which the author fancies) void of all bodies, is not altogether empty; what is it then full of? Is it full of extended spirits perhaps, or immaterial substances, capable of extending and contracting themselves; which move therein, and penetrate each other without any inconveniency, as the shadows of two bodies penetrate one another upon the surface of a wall? Methinks I see the revival of the *odd* imaginations of Dr. *Henry More* (otherwise a learned and well-meaning man), and of some others, who fancied that those spirits can make themselves impenetrable whenever they please. May, some have fancied, that *man* in the state of innocency, had also the gift of penetration; and that he became solid, opaque, and impenetrable by his fall. Is it not overthrowing our notions of things, to make God have parts, to make spirits have extension? The principle of the *want of a sufficient reason* does alone drive away all these spectres of imagination. Men easily run into fictions, for want of making a right use of that great principle.

To § 10.

49. It cannot be said, that [a certain] *duration* is eternal; but that *things*, which continue always, are eternal, [by gaining always new duration.] Whatever exists of time and of duration, [being successive] perishes continually: and how can a thing exist eternally, which, (to speak exactly,) does never exist at all? For, how can a thing exist, whereof no part does

ever exist? Nothing of time does ever exist, but instants; and an instant is not even itself a part of time. Whoever considers these observations, will easily apprehend that time can only be an ideal thing. And the analogy between time and space, will easily make it appear, that the one is as merely ideal as the other. [However, if by saying that the duration of a thing is eternal, is merely understood that it lasts eternally, I have no objection.]

50. If the reality of space and time, is necessary to the immensity and eternity of God; if God must be in space; if being in space, is a property of God; he will, in some measure, depend upon time and space, and stand in need of them. For I have already prevented that subterfuge, that space and time are [in God and as it were] *properties* of God. [Could the opinion which should affirm that bodies move about in the parts of the divine essence be maintained?]

To § 11 and 12.

51. I objected that space cannot be in God, because it has *parts.* Hereupon the author seeks another subterfuge, by departing from the received sense of words; maintaining that space has no parts, because its parts are not separable, and cannot be removed from one another by discerption. But 'tis sufficient that space has parts, whether those parts be separable or not; and they may be assigned in space, either by the bodies that are in it, or by lines and surfaces that may be drawn and described in it.

52. In order to prove that space, without bodies, is an absolute reality; the author objected, that a finite material universe might *move forward* in space. I answered, it does not appear *reasonable* that the material universe should be *finite;* and, though we should suppose it to be finite; yet 'tis *unreasonable* it should have *motion* any otherwise, than as its parts change their situation among themselves; because such a motion would produce *no charge* that could he observed, and would be without design. 'Tis another

thing, when its parts change their situation among themselves; for then there is a *motion in space;* but it consists in the *order of relations* which are changed. The author replies now, that the reality of motion does not depend upon being *observed;* and that a ship may go forward, and yet a man, who is in the ship, may not perceive it. I answer, motion does not indeed depend upon being *observed;* but it does depend upon being *possible to be observed.* There is no *motion,* when there is no *change that can be observed.* And when there is no *change that can be observed,* there is *no change at all.* The contrary opinion is grounded upon the supposition of a real absolute space, which I have demonstratively confuted by the principle of the *want of a sufficient reason* of things.

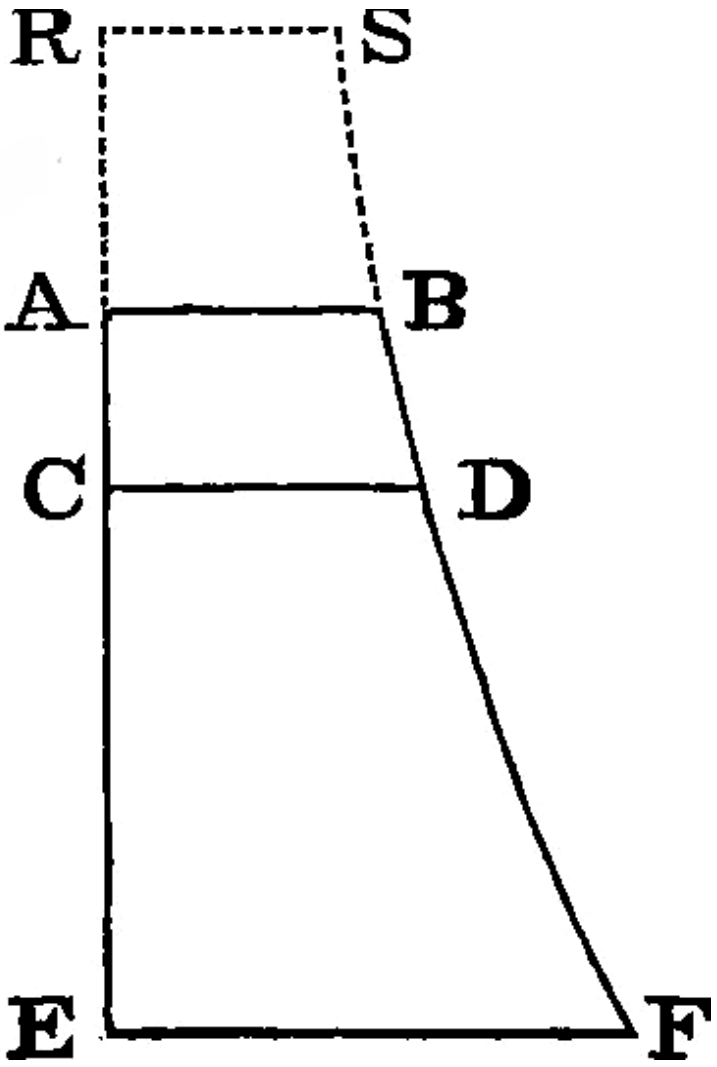
53. I find nothing in the *eighth definition of the Mathematical Principles of Nature,* nor in the *scholium belonging to it,* that proves, or can prove, the reality of space in itself. However, I grant there is a *difference* between *an absolute true motion of a body,* and a *mere relative change of its situation with respect to another body.* For when the immediate cause of the change is in the body, that body is truly in motion; and then the situation of other bodies, with respect to it, will be changed consequently, though the cause of that change be not in them. 'Tis true that, exactly speaking, there is not any one body, that is perfectly and entirely at rest; but we frame an abstract notion of rest, by considering the thing mathematically. Thus have I left nothing unanswered, of what has been alleged for the absolute reality of space. And I have demonstrated the falsehood of that reality, by a fundamental principle, one of the most certain both in reason and experience; against which, no exception or instance can be alleged. Upon the whole, one may judge from what has been said, that I ought not to admit a *movable universe;* nor any *place* out of the material universe.

54. I am not sensible of any objection, but what I think I have sufficiently answered. As for the objection that *space* and *time* are

quantities, or rather things *endowed with quantity;* and that *situation* and *order* are not so: I answer, that *order* also has its quantity; there is in it, that which goes before, and that which follows; there is distance or interval. *Relative* things have their *quantity*, as well as *absolute* ones. For instance, *ratios* or *proportions* in mathematics, have their *quantity*, and are *measured* by *logarithms;* and yet they are *relations.* And therefore though *time* and *space* consist in *relations*, yet they have their *quantity.*

To § 15.

55. As to the question, whether God could have created the world sooner; 'tis necessary here to understand each other rightly. Since I have demonstrated, that time, without things, is nothing else but a mere ideal possibility; 'tis manifest, if any one should say that this same world, which has been actually created, might have been created *sooner*, without any other change; he would say *nothing that is intelligible.* For there is no mark or difference, whereby it would be possible to know, that this world was created *sooner.* And therefore, (as I have already said), to suppose that God created the same world *sooner,* is supposing a chimerical thing. 'Tis making *time* a thing absolute, independent upon God; whereas *time* must co-exist with creatures, and is only conceived by the *order* and *quantity* of their changes.



56. But yet absolutely speaking, one may conceive that an universe began sooner, than it actually did. Let us suppose our universe, or any other, to be represented by the figure A F; and that the ordinate A B represents its first state; and the ordinates C D, E F, its following states: I say, one may conceive that such a world began sooner, by conceiving the figure prolonged backwards, and by adding to it S *R A B S.* For thus, *things* being increased, *time* will be also increased. But whether such an augmentation be *reasonable* and agreeable to God's wisdom, is another question, to which we answer in the negative; otherwise God *would* have made such an augmentation. It would be — like as

Humano capiti cervicem pictor equinam
Jungere si velit.

The case is the same with respect to the destruction [duration — Ger.] of the universe. As one might concern something added to the beginning, so one might also conceive something taken off towards the end. But such a retrenching from it, would be also *unreasonable.*

57. Thus it appears how we are to understand, that God created things at what *time* he *pleased;* for this depends upon the *things,* which he resolved to create. But *things* being once resolved upon, together with their *relations;* there remains no longer any choice about the *time* and the *place*, which of themselves have nothing in them real, nothing that can distinguish them, nothing that is at all discernible.

58. One cannot therefore say, as the author does here, that the wisdom of God may have *good reasons* to create this world at *such* or *such a particular time:* that particular time, considered without the *things*, being an *impossible* fiction; and *good reasons* for a choice, being not to be found, where everything is indiscernible.

59. When I speak of this world, I mean the whole universe of material and immaterial creatures taken together, from the beginning of things. But if any one mean only the beginning of the material world, and suppose immaterial creatures before it; he would have somewhat more reason for his supposition. For time then being marked by things that existed already, it would be no longer indifferent; and there might be room for choice. And yet indeed, this would be only putting off the difficulty. For, supposing the whole universe of immaterial and material creatures together, to have a beginning; there is no longer any choice about the *time,* in which God would place that beginning.

60. And therefore one must not say, as the author does here, that God created things in what particular *space,* and at what particular *time* he

pleased. For, all time and all spaces being in themselves perfectly uniform and indiscernible from each other, one of them cannot *please* more than another.

61. I shall not enlarge here upon my opinion explained elsewhere, that there are no created substances wholly destitute of matter. For I hold with the ancients, and according to reason, that angels or intelligences, and souls separated from a gross body, have always subtile bodies, though they themselves he incorporeal. The vulgar philosophy easily admits all sorts of fictions: mine is more strict.

62. I don't say that matter and space are the same thing. I only say, *there is no space*, *where there is no matter;* and that space in itself is not an absolute reality. Space and matter differ, as time and motion. However, these things, though different, are *inseparable.*

63. But yet it does not at all follow, that matter is eternal and necessary; unless we suppose *space* to be eternal and necessary; a supposition ill-grounded in all respects.

To § 16 and 17.

61. I think I have answered everything; and I have particularly replied to that objection, that *space* and *time* have *quantity*, and that *order* has none. *See above, Number* 51.

65. I have clearly shown that the contradiction lies in the hypothesis of the opposite opinion, which looks for a difference where there is none. And it would be a manifest iniquity to infer from thence, that I have acknowledged a contradiction in my own opinion.

To § 18.

66. Here I find again an argument, which I have overthrown above, *Number* 17. The author says, God may have *good reasons* to make two cubes

perfectly equal and alike: and then (says he) God must needs assign them their places, though every other respect be perfectly equal. But things ought not to be separated from their circumstances. This argument consists in incomplete notions. God's resolutions are never abstract and imperfect: as if God decreed, first, to create the two cubes; and then, made another decree where to place them. Men, being such limited creatures as they are, may act in this manner. They may resolve upon a thing, and then find themselves perplexed about means, ways, places, and circumstances. But God never takes a resolution about the ends, without resolving at the same time about the means, and all the circumstances. Nay, I have shown in my *Theodicaea,* that properly speaking, there is but one decree for the whole universe, whereby God resolved to bring it out of possibility into existence. And therefore God will not choose a cube, without choosing its place at the same time; and he will *never choose* among *indiscernibles.*

67. The parts of space are not determined and distinguished, but by the things which are in it: and the diversity of things in space, determines God to act differently upon different parts of space. But space without things, has nothing whereby it may be distinguished; and indeed not anything *actual.*

68. If God is resolved to place a certain cube of matter at all, he is also resolved in which particular place to put it. But 'tis with respect to other parts of matter; and not with respect to bare space itself, in which there is nothing to distinguish it.

69. But wisdom does not allow God to place at the same time *two cubes perfectly equal and alike;* because there is no way to find any *reason* for assigning them different places. At this rate, there would be *a will without a motive.*

70. A *will without motive* (such as superficial reasoners suppose to be in God), I compared *to Epicurus's chance.* The author answers; *Epicurus's*

chance is a blind necessity, and not a choice of will. I reply, that *Epicurus's chance* is not a necessity, but something indifferent. *Epicurus* brought it in on purpose to avoid necessity. 'Tis true, chance is blind; but a *will without motive* would be no less blind, and no less owing to mere chance.

To § 19.

71. The author repeats here, what has been already confuted above, *Number* 21; that matter cannot be created, without God's choosing among indiscernibles. He would be in the right, if matter consisted of atoms, similar particles, or other the like fictions of superficial philosophy. But that great principle, which proves there is no choice among indiscernibles, destroys also these ill-contrived fictions.

To § 20.

72. The author objected against me in his third paper (Numbers 7 and 8); that God would not have in himself a principle of acting, if he was determined by things external. I answered, that the ideas of external things are in him: and that therefore he is determined by internal reasons, that is, by his wisdom. But the author here will not understand, to what end I said it.

73. He frequently confounds, in his objections against me, what God *will not* do,' with what he *cannot* do. *See above*, *Number* 9 [*and below Number* 76]. For example; God *can* do everything that is possible, but he *will* do only what is best. And therefore I don't say, as the author here will have it, that God *cannot* limit the extension of matter; but 'tis likely he *will not* do it, and that, he has thought it better to set no bounds to matter.

74. From extension to duration, *non valet consequentia.* Though the *extension* of matter were unlimited, yet it would not follow that its *duration* would be also unlimited; nay even *à parte ante*, it would not follow, that it

had no beginning. If it is the nature of things in the whole, to grow uniformly in perfection; the universe of creatures must have had a beginning. And therefore, there will be reasons to limit the *duration* of things, even though there were none to limit their extension. Besides, the world's having a beginning, does not derogate from the infinity of its duration *à parte post;* but bounds of the universe would derogate from the infinity of its extension. And therefore it is more reasonable to admit a beginning of the world, than to admit any bounds of it; that the character of its infinite author, may be in both respects preserved.

75. However, those who have admitted the *eternity* of the world, or, at least, (as some famous divines have done), the *possibility* of its eternity; did not, for all that, deny its dependence upon God; as the author here lays to their charge, without any ground.

To § 22, 23.

76. He here further objects, without any reason, that, according to my opinion, whatever God *can* do, he *must needs* have done. As if he was ignorant, that I have solidly confuted this notion in my *Theodicaea;* and that I have overthrown the opinion of those, who maintain that there is nothing possible but what really happens; as some ancient philosophers did, and among others *Diodorus* in C*icero.* The author confounds *moral necessity*, which proceeds from the choice of what is *best* with *absolute necessity:* he confounds the *will* of God, with his *power.* God *can* produce everything that is possible, or whatever does not imply a contradiction; but he *wills* only to produce what is the *best* among things possible. *See what has been said above, Number* 9 *[and Number* 74.]

77. God is not therefore a necessary agent in producing creatures, since he acts with choice. However, what the author adds here, is ill-grounded, viz. that a necessary agent would not be an agent at all. He frequently

affirms things boldly, and without any ground; advancing [against me] notions which cannot he proved.

To § 24-28.

78. The author alleges, it was not affirmed that space is God's s*ensorium,* but only *as it were* his *sensorium.* The latter seems to be as improper, and as little intelligible, as the former.

To § 29.

79. *Space* is not the place of all things; for it is not the place of *God.* Otherwise there would be a thing co-eternal with God, and independent upon him; nay, he himself would depend upon *it,* if he has need of *place.*

80. Nor do I see, how it can be said, that *space* is the *place of ideas;* for *ideas* are in the *understanding.*

81. 'Tis also very strange to say, that the soul of man is the soul of the images it perceives. The images, which are in the understanding, are in the mind: but if the mind was the soul of the images, they would then be extrinsic to it. And if the author means corporeal images, how then will he have a *human mind* to be the *soul of those images,* they being only transient impressions in a body belonging to that soul?

82. If 'tis by *means* of a *sensorium,* that God perceives what passes in the world; it seems that things act upon him; and that therefore he is what we mean by *a soul of the world.* The author charges me with repeating objections; without taking notice of the answers; but I don't see that he has answered this difficulty. They had better *wholly lay aside* this pretended *sensorium.*

To § 30.

83. The author speaks, as if he did not understand, how, according to my opinion, the *soul* is a *representative principle.* Which is, as if he had never heard of my *pre-established harmony.*

84. I don't assent to the vulgar notions, that the *images of things* are *conveyed* by the *organs* [of sense] to the *soul.* For, it is not conceivable by what passage, or by what means of conveyance, these images can be carried from the organ to the soul. This vulgar notion in philosophy is not intelligible, as the new *Cartesians* have sufficiently shown. It cannot he explained, how im*material* substance is affected by *matter:* and to maintain an unintelligible notion thereupon, is having recourse to the scholastic chimerical notion of I know not what inexplicable *species intentionales,* passing from the organs to the soul. Those *Cartesians* saw the difficulty; but they could not explain it. They had recourse to a [certain wholly special] concourse of God, which would really be miraculous. But, I think, *I have given* the *true solution* of that *enigma.*

85. To say that God perceives what passes in the world, because he is p*resent* to the things, and not by [the dependence which the continuation of their existence has upon him and which may be said to involve] a *continual production* of them; is saying something unintelligible. A mere *presence* or proximity of co-existence, is not sufficient to make us understand, how that which passes in one being, should answer to what passes in another.

86. Besides; this is exactly falling into that opinion, which makes God to be the *soul of the world;* seeing it supposes God to perceive things, not by their dependence upon him, that is, by a *continual production* of what is good and perfect in them; but by a kind of perception, such as that by which men fancy our soul perceives what passes in the body. This is a degrading of God's knowledge very much.

87. In truth and reality, this way of perception is wholly chimerical, and has no place even in human souls. They perceive what passes without them,

by what passes within them, answering to the things without; in virtue of the harmony, which God has preestablished by the most beautiful and the most admirable of all his productions; whereby every simple substance is by its nature (if one may so say), a concentration, and a living mirror of the whole universe, according to its point of view. Which is likewise one of the most beautiful and most undeniable proofs of the existence of God; since none but God, viz. the universal cause, can produce such a harmony of things. But God himself cannot perceive things by the same means whereby he makes other beings perceive them. He perceives them, because he is able to produce that means. And other beings would not be caused to perceive them, if he himself did not produce them all *harmonious*, and had not therefore in himself a representation of them; not as if that representation came from the things, but because the things proceed from him, and because he is the efficient and exemplary cause of them. He perceives them, because they proceed from him; if one may be allowed to say, that he *perceives* them: which ought not to be said, unless we divest that word of its imperfection; for else it seems to signify, that things act upon him. They exist, and are known to him, because he understands and wills them; and because what he wills, is the same, as what exists. Which appears so much the more, because he makes them to be perceived by one another; and makes them perceive one another in consequence of the natures which he has given them once for all, and which he keeps up only according to the laws of every one of them severally; which, though different one from another, yet terminate in an exact, correspondence of the results of the whole. This surpasses all the ideas, which men have generally framed concerning the divine perfections, and the works of God; and raises [*our notion of]* them, to the highest degree; as Mr. *Bayle* has acknowledged, though he believed, without any ground, that it exceeded possibility.

88. To infer from that passage of Holy Scripture, wherein God is said to have rested from his works, that there is no longer a *continual production* of them; would be to make a very ill use of that text. 'Tis true, there is no production of *new* simple substances: but it would be wrong to infer from thence, that God is, now in the world, only as the soul is conceived to be in the body, *governing it merely* by his presence, without any concourse being necessary to continue its existence.

To § 31.

89. The *harmony,* or correspondence between the *soul* and the *body,* is not a perpetual *miracle*; but the effect or consequence of an original miracle worked at the creation of things; as all natural things are. Though indeed it is a perpetual *wonder,* as many natural things are.

90. The word, *pre-established harmony,* is a term of art, I confess; but 'tis not a term that explains nothing, since it is made out very intelligibly; and the author alleges nothing, that shows there is any difficulty in it.

91. The nature of every simple substance, soul, or true monad, being such, that its following state is a consequence of the preceding one; here now is the cause of the harmony found out. For God needs only to make a simple substance become once and from the beginning, a representation of the universe, according to its point of view, since from thence alone it follows, that it will be so *perpetually*; and that *all simple substances* will always have a *harmony* among themselves, because they always *represent* the same *universe.*

To § 32.

92. 'Tis true, that, according to me, the soul does not disturb the laws of the body, nor the body those of the soul; and that the *soul* and *body* do *only agree* together; the one acting freely, according to the rules of final causes;

and the other acting *mechanically,* according to the laws of efficient causes. But this does not derogate from the liberty of our souls, as the author here will have it. For, every agent which acts [with choice — *Ger.]* according to final causes, is free, though it happens to agree with an agent acting only by efficient causes without knowledge, or *mechanically;* because God, foreseeing what the free cause would do, did from the beginning regulate the *machine* in such manner, that it cannot fail to *agree* with that free cause. Mr. *Jaquelot* has very well resolved this difficulty, in one of his books against Mr. *Bayle*; and I have cited the passage, in my *Theodicaea,* Part I, § 63. I shall speak of it again below, *Number* 124.

To § 33.

93. I don't admit, that every *action* gives a *new force* to the *patient.* It frequently happens in the concourse of bodies, that each of them preserves its *force*; as when two equal hard bodies meet directly. Then the direction only is changed, without any change in the *force*; each of the bodies receiving the direction of the other, and going back with the same *swiftness* it came.

94. However, I am far from saying that it is *supernatural* to give a *new force* to a body; for I acknowledge that one body does frequently receive a new *force* from another, which loses as much of its own. But I say only, 'tis *supernatural* that the whole *universe of bodies* should receive a *new force*; and consequently that one body should acquire any new *force,* without the loss of as much in others. And therefore I say likewise, 'tis an indefensible opinion to suppose the *soul gives, force* to the *body;* for then the whole universe of bodies would receive a *new force.*

95. The author's dilemma here, is ill-grounded; viz. that according to me, either a man must act supernaturally, or he a mere *machine*, like a watch.

For, man does not act supernaturally: and his body is truly a *machine*, acting only *mechanically;* and yet his *soul* is a free cause.

To § 34 and 35.

96. I here refer to what has been or shall he said in this paper, *Number* 82, 86, [88] *and* 111: concerning the comparison between *God* and a *soul of the world;* and how the opinion contrary to mine, brings the one of these too near to the other.

To § 36.

97. I here also refer to what I have before said, concerning the *harmony* between the *soul* and the *body,* Number 89, &c.

To § 37.

98. The author tells us, that the soul is not in the brain, but in the *sensorium;* without saying what that *sensorium* is. But supposing that *sensorium* to be extended, as I believe the author understands it; the same difficulty still remains, and the question returns, whether the soul be diffused through that whole extension, be it great or small. For, more or less in bigness, is nothing to the purpose here.

To § 38.

99. I don't undertake here to establish my *Dynamics*, or my doctrine of *forces:* this would not be a proper place for it. However, I can very well answer the objection here brought against me. I have affirmed that *active forces* are preserved in the world *[without diminution*]. The author objects, that two *soft* or unelastic bodies meeting together, lose some of their *force.* I answer, no. 'Tis true, their *wholes* lose it with respect to their total motion; but their *parts* receive it, being shaken [internally] by the force of the concourse. And therefore that loss of *force*, is only in appearance. The *forces* are not destroyed, but scattered among the small parts. The bodies do

not *lose* their *forces;* but the case here is the same, as when men change great money into small. However, I agree that the *quantity of motion* does not remain the same; and herein I approve what Sir *Isaac Newton* says, *page* 341 of his *Optics,* which the author here quotes. But I have shown elsewhere, that there is a difference between the quantity of *motion*, and the quantity of *force.*

To § 39.

100. The author maintained against me, that *force* does naturally *lessen* in the material universe; and that this arises from the dependence of things, (*Third Reply*, § 13 *and* 14). In my *third answer,* I desired him to prove that this imperfection is a consequence of the dependence of things. He avoids answering my demand; by falling upon an incident, and denying this to be an imperfection. But whether it be an imperfection or not, he should have proved that ’tis a consequence of the dependence of things.

101. However; that which would make the machine of the world as imperfect, as that of an unskillful watchmaker; surely must needs be an imperfection.

102. The author says now, that it is a consequence of the *inertia* of matter. But this also, he will not prove. That *inertia,* alleged here by *him,* mentioned by *Kepler,* repeated by *Cartesius* [in his letters], and made use of by *me* in my *Theodicaea,* in order to give a notion [and at the same time an example] of the natural imperfection of creatures; has no other effect, than to make the velocities diminish, when the quantities of matter are increased: but this is without any *diminution of the forces.*

To § 40.

103. I maintained, that the dependence of the machine of the world upon its divine author, is rather a reason why there can be no such imperfection in it;

and that the work of God does not want to be set right again; that it is not liable to be disordered; and lastly, that it cannot lessen in perfection. Let any one guess now, how the author can hence infer against me, as he does, that, if this be the case, then the material world must be *infinite* and *eternal*, without any beginning; and that God must always have created *as many* men and other kinds of creatures, as *can possibly* he created.

To § 41.

104. I don't say, that space is an *order* or *situation,* which makes, things capable of being *situated:* this would be nonsense. Any one needs only consider my own words, and add "them to what I said above, (*Number* 47) in order to show how the mind comes to form to itself an idea of *space*, and yet that there needs not be any real and absolute being answering to that idea, distinct from the mind, and from all relations. I don't say therefore, that *space* is an *order or situation*, but an *order of situations;* or [an order] according to which, situations are disposed; and that *abstract space* is *that order of situations*, when they are conceived as being possible. Space is therefore something *[merely*] ideal. But, it seems, the author will not understand me. I have already, in this paper, *(.Number* 54) answered the objection, that *order* is not capable of *quantity.*

105. The author objects here, that *time* cannot be an *order of successive things*, because the *quantity of time* may become *greater* or *less,* and yet the *order of successions* continue the *same.* I answer: this is not so. For if the *time* is *greater,* there will be *more* successive and like states interposed; and if it be *less,* there will be *fewer;* seeing there is no *vacuum,* nor condensation, nor penetration (if I. may so speak), in *times,* any more than in *places.*

106. 'Tis true, [I maintain that] the immensity and eternity of God would subsist, though there were no creatures; but those attributes would have no

dependence either on *times or places.* If there were no creatures, there would be neither, *time* nor *place,* and consequently no actual *space.* The immensity of God is independent upon *space,* as his eternity is independent upon *time.* These attributes signify only [in respect to these two orders of things], that God would be present and co-existent with all the things that should exist. And therefore I don't admit what's here alleged, that if God existed alone, there would be *time* and *space* as there is now; whereas then, in my opinion, they would be only in the ideas of God as mere possibilities. The immensity and eternity of God are things more *transcendent,* than the duration and extension of creatures; not only with respect to the *greatness,* but also to the *nature* of the things. Those divine attributes do not imply the supposition of things extrinsic to God, such as are actual *places* and *times.* These truths have been sufficiently acknowledged by *divines* and *philosophers.*

To § 42.

107. I maintained, that an operation of God, by which he should mend the machine of the material world, tending in its nature (as this author pretends) to lose all its motion, would be a miracle. His answer was; that it would not be a miraculous operation, because it would be usual, and must frequently happen. I replied; that 'tis not usualness or unusualness, that makes a miracle properly so called, or a miracle of the highest sort; but its surpassing *the powers of creatures*; and that this is the [*general*] opinion of *divines* and *philosophers:* and that therefore the author acknowledges *at least,* that the thing he introduces, and I disallow, is, according to the *received notion,* a miracle of the highest sort, that is, one which surpasses all created powers: and that this is the very thing which all men endeavor to avoid in philosophy. He answers now, that this is appealing from *reason* to *vulgar opinion.* But I reply again, that this vulgar opinion, according to

which we ought in philosophy to avoid, as much as possible, what surpasses the natures of creatures; is a very reasonable opinion. Otherwise nothing will be easier than to account for anything by bringing in the Deity, *Deum ex machina,* without minding the natures of things.

108. Besides; the *common* opinion of *divines,* ought not to be looked upon merely as *vulgar opinion.* A man should have *weighty reasons,* before he ventures to contradict it; and I see no such reasons here.

109. The author seems to depart from his own notion, according to which a miracle ought to be unusual; when, in § 31, he objects to me (though without any ground), that, the pre-established harmony would be a perpetual *miracle.* Here, I say, he seems to depart from his own notion; unless he had a mind to argue against me *ad hominem.*

To § 43.

110. If a miracle differs from what is natural, only in appearance and with respect to us; so that we call that only a miracle, which we seldom see; there will be no internal real difference, between a miracle and what is natural; and at the bottom, every thing will be either equally *natural,* or equally *miraculous.* Will *divines* like the former, or *philosophers* the latter?

111. Will not this doctrine, moreover, tend to make God the soul of the world; if all his operations are natural, like those of our souls upon our bodies? And so God will be a part of *nature.*

112. In good philosophy, and sound theology, we ought to distinguish between what is explicable by the *natures* and *powers* of *creatures*, and what is explicable only by the *powers* of the *infinite substance.* We ought to make an infinite difference between the *operation of God,* which goes beyond the extent of *natural powers;* and the *operations* of things that follow the law which God has given them, and which he has enabled them to follow *by their natural powers,* though not without his assistance.

113. This overthrows *attractions,* properly so called, and other operations inexplicable by the natural powers of creatures; which kinds of operations, the assertors of them must suppose to be effected by *miracle;* or else have recourse to absurdities, that is, to the *occult qualities* of the schools; which some men begin to revive under the specious name of *forces;* but they bring us back again into the kingdom of darkness. This is, *inventa fruge, glandibus vesci.*

114. In the time of Mr. *Boyle,* and other excellent men, who flourished in *England* under *Charles* the lid, nobody would have ventured to publish such chimerical notions. I hope that happy time will return under so good a government as the present [and that minds a little too much carried away by the misfortune of the times will betake themselves to the better cultivation of sound learning]. Mr. *Boyle* made it his chief business to inculcate, that everything was done *mechanically* in natural philosophy. But it is men's misfortune to grow, at last, out of conceit with reason itself, and to be weary of light. *Chimeras* begin to appear again, and they are pleasing because they have something in them that is wonderful. What has happened in *poetry,* happens also in the *philosophical world.* People are grown weary of rational *romances,* such as were the *French Clelia,* or the *German Aramene;* and they are become fond again of the *tales of fairies.*

115. As for the *motions of the celestial bodies,* and even the *formation of plants* and *animals;* there is nothing in them that looks like a *miracle,* except their *beginning.* The *organism* of *animals* is a *mechanism,* which supposes a divine *preformation.* What follows upon it, is purely natural, and entirely *mechanical.*

116. *Whatever* is performed in the *body of man,* and of every *animal,* is no less *mechanical,* than what is performed in a *watch.*

The difference is only such, as ought to be between a *machine* of *divine* invention, and the workmanship of such a limited artist as *man* is.

To § 44.

117. There is no difficulty among divines, about the *miracles of angels.* The question is only about the use of that word. It may he said that *angels* work *miracles;* but less properly so called, or of an inferior order. To dispute about this, would be a mere question about a word. It may be said that the *angel*, who carried *Habakkuk* through the air, and he who troubled the water of the pool of *Bethesda,* worked a *miracle.* But it was not a miracle of the highest order; for it may be explained by the natural powers of angels, which surpass those of man.

To § 45.

118. I objected, that an attraction, properly so called, or in the scholastic sense, would be an operation at a distance, without any means intervening. The author answers here, that an attraction without any means intervening, would be indeed a contradiction. Very well! But then what does he mean, when he will have the sun to attract the globe of the earth through an empty space? Is it God himself that performs it? But this would be a *miracle,* if ever there was any. This would surely exceed the powers of creatures.

119. Or, are perhaps some immaterial substances, or some spiritual rays, or some accident without a substance, or some kind of *species intentionalis*, or some other I *know not what,* the *means* by which this is pretended to be performed? Of which sort of things, the author seems to have still a good stock in his head, without explaining himself sufficiently.

120. *That means* of communication (says he) is invisible, intangible, not mechanical. He might as well have added, inexplicable, unintelligible, precarious, groundless, and unexampled.

121. But it is *regular,* (says the author), it is *constant,* and consequently *natural.* I answer; it cannot be regular, without being reasonable; nor

natural, unless it can be explained by the natures of creatures.

122. If the *means,* which causes an *attraction* properly so called, be constant, and at the same time inexplicable by the powers of creatures, and yet be true; it must be a perpetual *miracle:* and if it is not miraculous, it is false. 'Tis a chimerical thing, a scholastic *occult quality.*

123. The case would be the same, as in a body going round without receding in the tangent, though nothing that can be explained, hindered it from receding. Which is an instance I have already alleged; and the author has not thought fit to answer it, because it shows too clearly the difference between what is truly *natural* on the one side, and a *chimerical occult quality* of the schools on the other.

To § 46.

124. All the natural forces of *bodies,* are subject to *mechanical laws;* and all the natural powers of *spirits,* are subject to *moral laws.* The former follow the order of efficient causes; and the latter follow the order of final causes. The former operate without liberty, like a watch; the latter operate with liberty, though they exactly agree with that machine, which another cause, free and superior, has adapted to them beforehand. I have already spoken of this, *above, No.* 92.

125. I shall conclude with what the author objected against me at the beginning of this fourth reply: to which I have already given an answer above (*Number* 18, 19, 20). But I deferred speaking more fully upon that head, to the conclusion of this paper. He pretended, that I have been guilty of a *petitio principii.* But, of *what* principle, I beseech you? Would to God, less clear principles had never been laid down. The principle in question, is the principle of the *want of a sufficient reason;* in order to any thing's existing, in order to any event's happening, in order to any truth's taking place. Is this a principle, that wants to be *proved?* The author granted it, or

pretended to grant it, *Number* 2, *of his third paper;* possibly, because the denial of it would have appeared too unreasonable. But either he has done it only in words, or he contradicts himself, or retracts his concession.

126. I dare say, that without this great principle, one cannot prove the existence of God, nor account for many other important truths.

127. Has not everybody made use of this principle, upon a thousand occasions. 'Tis true, it has been neglected, out of carelessness, on many occasions: but that neglect has been the true cause of *chimeras;* such as are (for instance), an absolute real *time* or *space,* a *vacuum, atoms, attraction* in the scholastic sense, a *physical influence of the soul over the body,* and a thousand other *fictions,* either derived from erroneous opinions of the ancients, or lately invented by modern philosophers.

128. Was it not upon account of *Epicurus's* violating this great principle, that the ancients derided his groundless *declination* of atoms? And I dare say, the scholastic *attraction,* revived in our days, and no less derided about thirty years ago, is not at all more reasonable.

129. I have often defied people to allege an instance against that great principle, to bring any one uncontested example wherein it fails. But they have never done it, nor ever will. 'Tis certain, there is an infinite number of instances, wherein it succeeds, [or rather it succeeds] in all the known cases in which it has been made use of. From whence one may reasonably judge, that it will succeed also in unknown cases, or in such cases as can only by its means become known: according to the method of experimental philosophy, which proceeds *a posteriori;* though the principle were not perhaps otherwise justified by bare reason, or *a priori.*

130. To deny this great principle, is likewise to do as Epicurus did; who was reduced to deny that other great principle, viz. the *principle of contradiction*; which is, that every intelligible enunciation must be either true, or false. C*hrysippus* undertook to prove that principle against

Epicurus; but I think I need not imitate him. I have already said, what is sufficient to justify mine: and I might say something more upon it; but perhaps it would be too abstruse for this present dispute. And, I believe, reasonable and impartial men will grant me, that having forced an adversary to deny that principle, is reducing him *ad absurdum.*

Correspondence with Baruch Spinoza

Translated by R. H. M. Elwes

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Godfrey Leibnitz to Spinoza.
Spinoza to Leibnitz.

A seventeenth century portrait of an unidentified man by Barend Graat — recent speculation has suggested that the sitter was Spinoza.

Godfrey Leibnitz to Spinoza.

1671, October 5

DISTINGUISHED SIR, —

Among your other merits spread abroad by fame, I understand that you have remarkable skill in optics. I have, therefore, wished to forward my essay, such as it is, to you, as I am not likely to find a better critic in this branch of learning. The paper, which I send you, and which I have styled "a note on advanced optics," has been published with the view of more conveniently making known my ideas to my friends and the curious in such matters. I hear that * * * * * is very clever in the same subject, doubtless he is well known to you. If you could obtain for me his opinion and kind attention, you would greatly increase my obligation to you. The paper explains itself.

I believe you have already received the "Prodromo" of Francis Lana the Jesuit, written in Italian. Some remarkable observations on optics are contained in it. John Oltius too, a young Swiss very learned in these matters, has published "Physico-Mechanical Reflections concerning Vision;" in which he announces a machine for the polishing all kinds of glasses, very simple and of universal applicability, and also declares that he has discovered a means of collecting all the rays coming from different points of an object, so as to obtain an equal number of corresponding points, but only under conditions of a given distance and form of object.

My proposal is, not that the rays from all points should be collected and re-arranged (this is with any object or distance impossible at the present stage of our knowledge); the result I aim at is the equal collection of rays from points outside the optic axis and in the optic axis, so that the apertures

of glasses could be made of any size desired without impairing the distinctness of vision. But this must stand according to your skilled verdict. Farewell, and believe me, distinguished Sir, your obedient servant,

Godfrey Leibnitz,
J. U. D. Councillor of the Elector of Mainz.
Frankfort,
5 Oct. 1671
(new style).
Benedict de Spinoza
9 Nov. 1671
The Hague
Godfrey Leibnitz

Spinoza to Leibnitz.

1671, November 9

[Answer to the foregoing letter].

Most learned and distinguished Sir, —

I have read the paper you were kind enough to send me, and return you many thanks for the communication. I regret that I have not been able quite to follow your meaning, though you explain it sufficiently clearly, whether you think that there is any cause for making the apertures of the glasses small, except that the rays coming from a single point are not collected accurately at another single point, but in a small area which we generally call the mechanical point, and that this small area is greater or less in proportion to the size of the aperture. Further, I ask whether the lenses which you call "pandochæ" correct this fault, so that the mechanical point or small area, on which the rays coming from a single point are after refraction collected, always preserves the same proportional size, whether the aperture be small or large. If so, one may enlarge the aperture as much as one likes, and consequently these lenses will be far superior to those of any other shape known to me; if not, I hardly see why you praise them so greatly beyond common lenses. For circular lenses have everywhere the same axis; therefore, when we employ them, we must regard all the points of an object as placed in the optic axis; although all the points of the object be not at the same distance, the difference arising thence will not be perceptible, when the objects are very remote; because then the rays coming from a single point would, as they enter the glass, be regarded as parallel. I think your lenses might be of service in obtaining a more distinct

representation of all the objects, when we wish to include several objects in one view, as we do, when we employ very large convex circular lenses. However, I would rather suspend my judgment about all these details, till you have more clearly explained your meaning, as I heartily beg you to do. I have, as you requested, sent the other copy of your paper to Mr. * * * *. He answers, that he has at present no time to study it, but he hopes to have leisure in a week or two.

I have not yet seen the "Prodromo" of Francis Lana, nor the "Physico-Mechanical Reflections" of John Oltius. What I more regret is, that your "Physical Hypothesis" has not yet come to my hands, nor is there a copy for sale here at the Hague. The gift, therefore, which you so liberally promise me will be most acceptable to me; if I can be of use to you in any other matter, you will always find me most ready. I hope you will not think it too irksome to reply to this short note.

Distinguished Sir,
Yours sincerely,

B. de Spinoza.
The Hague,
9 Nov. 1671.

P.S. Mr. Diemerbroech does not live here. I am, therefore, forced to entrust this to an ordinary letter-carrier. I doubt not that you know someone at the Hague, who would take charge of our letters; I should like to hear of such a person, that our correspondence might be more conveniently and securely taken care of. If the "Tractatus Theologico-Politicus" has not yet come to your hands, I will, unless you have any objection, send you a copy. Farewell.

Lewis Fabritius
16 Feb. 1673

Heidelberg
Benedict de Spinoza

The Criticism

The University of Altdorf, 1714 — Leibniz received his Doctor of Law degree from the University of Altdorf in 1666.

An Abstract of a Book Lately Published Entitled a Treatise of Human Nature Etc. (1740) by David Hume

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PREFACE.

AN ABSTRACT OF A BOOK LATELY PUBLISHED, ENTITULED, A TREATISE OF HUMAN NATURE, &C.

David Hume by Allan Ramsay, 1766

PREFACE.

MY EXPECTATIONS IN this small performance may seem somewhat extraordinary, when I declare that my intentions are to render a larger work more intelligible to ordinary capacities, by abridging it. 'Tis however certain, that those who are not accustomed to abstract reasoning, are apt to lose the thread of argument, where it is drawn out to a great length, and each part fortified with all the arguments, guarded against all the objections, and illustrated with all the views, which occur to a writer in the diligent survey of his subject. Such Readers will more readily apprehend a chain of reasoning, that is more single and concise, where the chief propositions only are linkt on to each other, illustrated by some simple examples, and confirmed by a few of the more forcible arguments. The parts lying nearer together can better be compared, and the connexion be more easily traced from the first principles to the last conclusion.

THE work, of which I here present the Reader with an abstract, has been complained of as obscure and difficult to be comprehended, and I am apt to think, that this proceeded as much from the length as from the abstractedness of the argument. If I have remedy'd this inconvenience in any degree, I have attain'd my end. The book seem'd to me to have such an air of singularity, and novelty as claim'd the attention of the public; especially if it be found, as the Author seems to insinuate, that were his philosophy receiv'd, we must alter from the foundation the greatest part of the sciences. Such bold attempts are always advantageous in the republic of letters, because they shake off the yoke of authority, accustom men to think for themselves, give new hints, which men of genius may carry further, and

by the very opposition, illustrate points, wherein no one before suspected any difficulty.

THE Author must be contented to wait with patience for some time before the learned world can agree in their sentiments of his performance. ’Tis his misfortune, that he cannot make an appeal to the people, who in all matters of common reason and eloquence are found so infallible a tribunal. He must be judg’d by the FEW, whose verdict is more apt to be corrupted by partiality and prejudice, especially as no one is a proper judge in these subjects, who has not often thought of them; and such are apt to form to themselves systems of their own, which they resolve not to relinquish. I hope the Author will excuse me for intermeddling in this affair, since my aim is only to encrease his auditory, by removing some difficulties, which have kept many from apprehending his meaning.

I have chosen one simple argument, which I have carefully traced from the beginning to the end. This is the only point I have taken care to finish. The rest is only hints of particular passages, which seem’d to me curious and remarkable.

AN ABSTRACT OF A BOOK LATELY PUBLISHED, ENTITULED, A TREATISE OF HUMAN NATURE, &C.

THIS BOOK SEEMS to be wrote upon the same plan with several other works that have had a great vogue of late years in England. The philosophical spirit, which has been so much improved all over Europe within these last fourscore years, has been carried to as great a length in this kingdom as in any other. Our writers seem even to have started a new kind of philosophy, which promises more both to the entertainment and advantage of mankind, than any other with which the world has been yet acquainted. Most of the philosophers of antiquity, who treated of human nature, have shewn more of a delicacy of sentiment, a just sense of morals, or a greatness of soul, than a depth of reasoning and reflection. They content themselves with representing the common sense of mankind in the strongest lights, and with the best turn of thought and expression, without following out steadily a chain of propositions, or forming the several truths into a regular science. But ’tis at least worth while to try if the science of man will not admit of the same accuracy which several parts of natural philosophy are found susceptible of. There seems to be all the reason in the world to imagine that it may be carried to the greatest degree of exactness. If, in examining several phaenomena, we find that they resolve themselves into one common principle, and can trace this principle into another, we shall at last arrive at those few simple principles, on which all the rest depend. And tho’ we can never arrive at the ultimate principles, ’tis a satisfaction to go as far as our faculties will allow us.

THIS seems to have been the aim of our late philosophers, and, among the rest, of this author. He proposes to anatomize human nature in a regular

manner, and promises to draw no conclusions but where he is authorized by experience. He talks with contempt of hypotheses; and insinuates, that such of our countrymen as have banished them from moral philosophy, have done a more signal service to the world, than my Lord Bacon, whom he considers as the father of experimental physicks. He mentions, on this occasion, Mr. Locke, my Lord Shaftsbury, Dr. Mandeville, Mr. Hutchison, Dr. Butler, who, tho' they differ in many points among themselves, seem all to agree in founding their accurate disquisitions of human nature intirely upon experience.

BESIDE the satisfaction of being acquainted with what most nearly concerns us, it may be safely affirmed, that almost all the sciences are comprehended in the science of human nature, and are dependent on it. The sole end of logic is to explain the principles and Operations of our reasoning faculty, and the nature of our ideas; morals and criticism regard our tastes and sentiments; and politics consider men as united in society, and dependent on each other. This treatise therefore of human nature seems intended for a system of the sciences. The author has finished what regard logic, and has laid the foundation of the other parts in his account of the passions.

THE celebrated Monsieur Leibnitz has observed it to be a defect in the common systems of logic, that they are very copious when they explain the operations of the understanding in the forming of demonstrations, but are too concise when they treat of probabilities, and those other measures of evidence on which life and action intirely depend, and which are our guides even in most of our philosophical speculations. In this censure, he comprehends the essay on human understanding, le recherche de la verité, and l'art de penser. The author of the treatise of human nature seems to have been sensible of this defect in these philosophers, and has endeavoured, as much as he can, to supply it. As his book contains a great

number of speculations very new and remarkable, it will be impossible to give the reader a just notion of the whole. We shall therefore chiefly confine ourselves to his explication of our reasonings from cause and effect. If we can make this intelligible to the reader, it may serve as a specimen of the whole.

OUR author begins with some definitions. He calls a perception whatever can be present to the mind, whether we employ our senses, or are actuated with passion, or exercise our thought and reflection. He divides our perceptions into two kinds, viz. impressions and ideas. When we feel a passion or emotion of any kind, or have the images of external objects conveyed by our senses; the perception of the mind is what he calls an impression, which is a word that he employs in a new sense. When we reflect on a passion or an object which is not present, this perception is an idea. Impressions, therefore, are our lively and strong perceptions; ideas are the fainter and weaker. This distinction is evident; as evident as that betwixt feeling and thinking.

THE first proposition he advances, is, that all our ideas, or weak perceptions, are derived from our impressions, or strong perceptions, and that we can never think of any thing which we have not seen without us, or felt in our own minds. This proposition seems to be equivalent to that which Mr. Locke has taken such pains to establish, viz. that no ideas are innate. Only it may be observed, as an inaccuracy of that famous philosopher, that he comprehends all our perceptions under the term of idea, in which sense it is false, that we have no innate ideas. For it is evident our stronger perceptions or impressions are innate, and that natural affection, love of virtue, resentment, and all the other passions, arise immediately from nature. I am perswaded, whoever would take the question in this light, would be easily able to reconcile all parties. Father Malebranche would find himself at a loss to point out any thought of the mind, which did not

represent something antecedently felt by it, either internally, or by means of the external senses, and must allow, that however we may compound, and mix, and augment, and diminish our ideas, they are all derived from these sources. Mr. Locke, on the other hand, would readily acknowledge, that all our passions are a kind of natural instincts, derived from nothing but the original constitution of the human mind.

OUR author thinks,

"that no discovery could have been made more happily for deciding all controversies concerning ideas than this, that impressions always take the precedency of them, and that every idea with which the imagination is furnished, first makes its appearance in a correspondent impression. These latter perceptions are all so clear and evident, that they admit of no controversy; tho' many of our ideas are so obscure, that 'tis almost impossible even for the mind, which forms them, to tell exactly their nature and composition."

Accordingly, wherever any idea is ambiguous, he has always recourse to the impression, which must render it clear and precise. And when he suspects that any philosophical term has no idea annexed to it (as is too common) he always asks from what impression that idea is derived? And if no impression can be produced, he concludes that the term is altogether insignificant. 'Tis after this manner he examines our idea of substance and essence; and it were to be wished, that this rigorous method were more practised in all philosophical debates.

'TIS evident, that all reasonings concerning matter of fact are founded on the relation of cause and effect, and that we can never infer the existence of one object from another, unless they be connected together, either mediately or immediately. In order therefore to understand these reasonings, we must be perfectly acquainted with the idea of a cause; and in order to that, must look about us to find something that is the cause of another.

HERE is a billiard-ball lying on the table, and another ball moving towards it with rapidity. They strike; and the ball, which was formerly at rest, now acquires a motion. This is as perfect an instance of the relation of cause and effect as any which we know, either by sensation or reflection. Let us therefore examine it. 'Tis evident, that the two balls touched one another before the motion was communicated, and that there was no interval betwixt the shock and the motion. Contiguity in time and place is therefore a requisite circumstance to the operation of all causes. 'Tis evident likewise, that the motion, which was the cause, is prior to the motion, which was the effect. Priority in time, is therefore another requisite circumstance in every cause. But this is not all. Let us try any other balls of the same kind in a like situation, and we shall always find, that the impulse of the one produces motion in the other. Here therefore is a third circumstance, viz. that of a constant conjunction betwixt the cause and effect. Every object like the cause, produces always some object like the effect. Beyond these three circumstances of contiguity, priority, and constant conjunction, I can discover nothing in this cause. The first ball is in motion; touches the second; immediately the second is in motion: and when I try the experiment with the same or like balls, in the same or like circumstances, I find, that upon the motion and touch of the one ball, motion always follows in the other. In whatever shape I turn this matter, and however I examine it, I can find nothing farther.

THIS is the case when both the cause and effect are present to the senses. Let us now see upon what our inference is founded, when we conclude from the one that the other has existed or will exist. Suppose I see a ball moving in a streight line towards another, I immediately conclude, that they will shock, and that the second will be in motion. This is the inference from cause to effect; and of this nature are all our reasonings in the conduct of life: on his is founded all our belief in history: and from hence is derived all

philosophy, excepting only geometry and arithmetic. If we can explain the inference from the shock of two balls, we shall be able to account for this operation of the mind in all instances.

WERE a man, such as Adam, created in the full vigour of understanding, without experience, he would never be able to infer motion in the second ball from the motion and impulse of the first. It is not any thing that reason sees in the cause, which make us infer the effect. Such an inference, were it possible, would amount to a demonstration, as being founded merely on the comparison of ideas. But no inference from cause to effect amounts to a demonstration. Of which there is this evident proof. The mind can always conceive any effect to follow from any cause, and indeed any event to follow upon another: whatever we conceive is possible, at least in a metaphysical sense: but wherever a demonstration takes place, the contrary is impossible, and implies a contradiction. There is no demonstration, therefore, for any conjunction of cause and effect. And this is a principle, which is generally allowed by philosophers.

IT would have been necessary, therefore, for Adam (if he was not inspired) to have had experience of the effect, which followed upon the impulse of these two balls. He must have seen, in several instances, that when the one ball struck upon the other, the second always acquired motion. If he had seen a sufficient number of instances of this kind, whenever he saw the one ball moving towards the other, he would always conclude without hesitation, that the second would acquire motion. His understanding would anticipate his sight, and form a conclusion suitable to his past experience.

IT follows, then, that all reasonings concerning cause and effect, are founded on experience, and that all reasonings from experience are founded on the supposition, that the course of nature will continue uniformly the same. We conclude, that like causes, in like circumstances, will always

produce like effects. It may now be worth while to consider, what determines us to form a conclusion of such infinite consequence.

'TIS evident, that Adam with all his science, would never have been able to demonstrate, that the course of nature must continue uniformly the same, and that the future must be conformable to the past. What is possible can never be demonstrated to be false; and 'tis possible the course of nature may change, since we can conceive such a change. Nay, I will go farther, and assert, that he could not so much as prove by any probable arguments, that the future must be conformable to the past. All probable arguments are built on the supposition, that there is this conformity betwixt the future and the past, and therefore can never prove it. This conformity is a matter of fact, and if it must be proved, will admit of no proof but from experience. But our experience in the past can be a proof of nothing for the future, but upon a supposition, that there is a resemblance betwixt them. This therefore is a point, which can admit of no proof at all, and which we take for granted without any proof.

WE are determined by CUSTOM alone to suppose the future conformable to the past. When I see a billiard-ball moving towards another, my mind is immediately carry'd by habit to the usual effect, and anticipates my sight by conceiving the second ball in motion. There is nothing in these objects, abstractly considered, and independent of experience, which leads me to form any such conclusion: and even after I have had experience of many repeated effects of this kind, there is no argument, which determines me to suppose, that the effect will be conformable to past experience. The powers, by which bodies operate, are entirely unknown. We perceive only their sensible qualities: and what reason have we to think, that the same powers will always be conjoined with the same sensible qualities?

'TIS not, therefore, reason, which is the guide of life, but custom. That alone determines the mind, in all instances, to suppose the future

conformable to the past. However easy this step may seem, reason would never, to all eternity, be able to make it.

THIS is a very curious discovery, but leads us to others, that are still more curious. When I see a billiard ball moving towards another, my mind is immediately carried by habit to the usualand anticipate my sight by conceiving the second ball in motion. But is this all? Do I nothing but CONCEIVE the motion of the second ball? No surely. I also BELIEVE that it will move. What then is this belief? And how does it differ from the simple conception of any thing? Here is a new question unthought of by philosophers.

When a demonstration convinces me of any proposition, it not only makes me conceive the proposition, but also makes me sensible, that 'tis impossible to conceive any thing contrary. What is demonstratively false implies a contradiction; and what implies a contradiction cannot be conceived. But with regard to any matter of fact, however strong the proof may be from experience, I can always conceive the contrary, tho' I cannot always believe it. The belief, therefore, makes some difference betwixt the conception to which we assent, and that to which we do not assent.

To account for this, there are only two hypotheses. It may be said, that belief joins some new idea to those which we may conceive without assenting to them. But this hypothesis is false. For first, no such idea can be produced. When we simply conceive an object, we conceive it in all its parts. We conceive it as it might exist, tho' we do not believe it to exist. Our belief of it would discover no new qualities. We may paint out the entire object in imagination without believing it. We may set it, in a manner, before our eyes, with every circumstance of time and place. 'Tis the very object conceived as it might exist; and when we believe it, we can do no more.

Secondly, THE mind has a faculty of joining all ideas together, which involve not a contradiction; and therefore if belief consisted in some idea, which we add to the simple conception, it would be in a man's power, by adding this idea to it, to believe any thing, which he can conceive.

SINCE therefore belief implies a conception, and yet is something more; and since it adds no new idea to the conception; it follows, that it is a different MANNER of conceiving an object; something that is distinguishable to the feeling, and depends not upon our will, as all our ideas do. My mind runs by habit from the visible object of one ball moving towards another, to the usual effect of motion in the second ball. It not only conceives that motion, but feels something different in the conception of it from a mere reverie of the imagination. The presence of this visible object, and the constant conjunction of that particular effect, render the idea different to the feeling from those loose ideas, which come into the mind without any introduction. This conclusion seems a little surprizing; but we are led into it by a chain of propositions, which admit of no doubt. To ease the reader's memory I shall briefly resume them. No matter of fact can be proved but from its cause or its effect. Nothing can be known to be the cause of another but by experience. We can give no reason for extending to the future our experience in the past; but are entirely determined by custom, when we conceive an effect to follow from its usual cause. But we also believe an effect to follow, as well as conceive it. This belief joins no new idea to the conception. It only varies the manner of conceiving, and makes a difference to the feeling or sentiment. Belief, therefore, in all matters of fact arises only from custom, and is an idea conceived in a peculiar manner.

OUR author proceeds to explain the manner or feeling, which renders belief different from a loose conception. He seems sensible, that 'tis impossible by words to describe this feeling, which every one must be conscious of in his own breast. He calls it sometimes a stronger conception,

sometimes a more lively, a more vivid, a firmer, or a more intense conception. And indeed, whatever name we may give to this feeling, which constitutes belief, our author thinks it evident, that it has a more forcible effect on the mind than fiction and mere conception. This he proves by its influence on the passions and on the imagination; which are only moved by truth or what is taken for such. Poetry, with all its art, can never cause a passion, like one in real life. It fails in the original conception of its objects, which never feel in the same manner as those which command our belief and opinion.

OUR author presuming, that he had sufficiently proved, that the ideas we assent to are different to the feeling from the other ideas, and that this feeling is more firm and lively than our common conception, endeavours in the next place to explain the cause of this lively feeling by an analogy with other acts of the mind. His reasoning seems to be curious; but could scarce be rendered intelligible, or at least probable to the reader, without a long detail, which would exceed the compass I have prescribed to myself.

I have likewise omitted many arguments, which he adduces to prove that belief consists merely in a peculiar feeling or sentiment. I shall only mention one; our past experience is not always uniform. Sometimes one effect follows from a cause, sometimes another: In which case we always believe, that that will exist which is most common. I see a billiard-ball moving towards another. I cannot distinguish whether it moves upon its axis, or was struck so as to skim along the table. In the first case, I know it will not stop after the shock. In the second it may stop. The first is most common, and therefore I lay my account with that effect. But I also conceive the other effect, and conceive it as possible, and as connected with the cause. Were not the one conception different in the feeling or sentiment from the other, there would be no difference betwixt them.

WE have confin’d ourselves in this whole reasoning to the relation of cause and effect, as discovered in the motions and operations of matter. But the same reasoning extends to the operations of the mind. Whether we consider the influence of the will in moving our body, or in governing our thought, it may safely be affirmed, that we could never foretel the effect, merely from the consideration of the cause, without experience. And even after we have experience of these effects, ’tis custom alone, not reason, which determines us to make it the standard of our future judgments. When the cause is presented, the mind, from habit, immediately passes to the conception and belief of the usual effect. This belief is something different from the conception. It does not, however, join any new idea to it. It only makes it be felt differently, and renders it stronger and more lively.

HAVING dispatcht this material point concerning the nature of the inference from cause and effect, our author returns upon his footsteps, and examines anew the idea of that relation. In the considering of motion communicated from one ball to another, we could find nothing but contiguity, priority in the cause, and constant conjunction. But, beside these circumstances, ’tis commonly suppos’d, that there is a necessary connexion betwixt the cause and effect, and that the cause possesses something, which we call a power, or force, or energy. The question is, what idea is annex’d to these terms? If all our ideas or thoughts be derived from our impressions, this power must either discover itself to our senses, or to our internal feeling. But so little does any power discover itself to the senses in the operations of matter, that the Cartesians have made no scruple to assert, that matter is utterly deprived of energy, and that all its operations are perform’d merely by the energy of the supreme Being. But the question still recurs, What idea have we of energy or power even in the supreme Being? All our idea of a Deity (according to those who deny innate ideas) is nothing but a composition of those ideas, which we acquire from reflecting on the

operations of our own minds. Now our own minds afford us no more notion of energy than matter does. When we consider our will or volition a priori, abstracting from experience, we should never be able to infer any effect from it. And when we take the assistance of experience, it only shows us objects contiguous, successive, and constantly conjoined. Upon the whole, then, either we have no idea at all of force and energy, and these words are altogether insignificant, or they can mean nothing but that determination of the thought, acquir'd by habit, to pass from the cause to its usual effect. But who-ever would thoroughly understand this must consult the author himself. 'Tis sufficient, if I can make the learned world apprehend, that there is some difficulty in the case, and that who-ever solves the difficulty must say some thing very new and extraordinary; as new as the difficulty itself.

BY all that has been said the reader will easily perceive, that the philosophy contain'd in this book is very sceptical, and tends to give us a notion of the imperfections and narrow limits of human understanding. Almost all reasoning is there reduced to experience; and the belief, which attends experience, is explained to be nothing but a peculiar sentiment, or lively conception produced by habit. Nor is this all, when we believe any thing of external existence, or suppose an object to exist a moment after it is no longer perceived, this belief is nothing but a sentiment of the same kind. Our author insists upon several other sceptical topics; and upon the whole concludes, that we assent to our faculties, and employ our reason only because we cannot help it. Philosophy wou'd render us entirely Pyrrhonian, were not nature too strong for it.

I shall conclude the logics of this author with an account of two opinions, which seem to be peculiar to himself, as indeed are most of his opinions. He asserts, that the soul, as far as we can conceive it, is nothing but a system or train of different perceptions, those of heat and cold, love

and anger, thoughts and sensations; all united together, but without any perfect simplicity or identity. Des Cartes maintained that thought was the essence of the mind; not this thought or that thought, but thought in general. This seems to be absolutely unintelligible, since every thing, that exists, is particular: And therefore it must be our several particular perceptions, that compose the mind. I say, compose the mind, not belong to it. The mind is not a substance, in which the perceptions inhere. That notion is as unintelligible as the Cartesian, that thought or perception in general is the essence of the mind. We have no idea of substance of any kind, since we have no idea but what is derived from some impression, and we have no impression of any substance either material or spiritual. We know nothing but particular qualities and perceptions. As our idea of any body, a peach, for instance, is only that of a particular taste, colour, figure, size, consistence, &c. So our idea of any mind is only that of particular perceptions, without the notion of any thing we call substance, either simple or compound.

THE second principle, which I proposed to take notice of, is with regard to Geometry. Having denied the infinite divisibility of extension, our author finds himself obliged to refute those mathematical arguments, which have been adduced for it; and these indeed are the only ones of any weight. This he does by denying Geometry to be a science exact enough to admit of conclusions so subtile as those which regard infinite divisibility. His arguments may be thus explained. All Geometry is founded on the notions of equality and inequality, and therefore according as we have or have not an exact standard of that relation, the science itself will or will not admit of great exactness. Now there is an exact standard of equality, if we suppose that quantity is composed of indivisible points. Two lines are equal when the numbers of the points, that compose them, are equal, and when there is a point in one corresponding to a point in the other. But tho' this standard be

exact, ’tis useless; since we can never compute the number of points in any line. It is besides founded on the supposition of finite divisibility, and therefore can never afford any conclusion against it. If we reject this standard of equality, we have none that has any pretensions to exactness. I find two that are commonly made use of. Two lines above a yard, for instance, are said to be equal, when they contain any inferior quantity, as an inch, an equal number of times. But this runs in a circle. For the quantity we call an inch in the one is supposed to be equal to what we call an inch in the other: And the question still is, by what standard we proceed when we judge them to be equal; or, in other words, what we mean when we say they are equal. If we take still inferior quantities, we go on in infinitum. This therefore is no standard of equality. The greatest part of philosophers, when ask’d what they mean by equality, say, that the word admits of no definition, and that it is sufficient to place before us two equal bodies, such as two diameters of a circle, to make us understand that term. Now this is taking the general appearance of the objects for the standard of that proportion, and renders our imagination and senses the ultimate judges of it. But such a standard admits of no exactness, and can never afford any conclusion contrary to the imagination and senses. Whether this question be just or not, must be left to the learned world to judge. ‘Twere certainly to be wish’d, that some expedient were fallen upon to reconcile philosophy and common sense, which with regard to the question of infinite divisibility have wag’d most cruel wars with each other.

WE must now proceed to give some account of the second volume of this work, which treats of the PASSIONS. ’Tis of more easy comprehension than the first; but contains opinions, that are altogether as new and extraordinary. The author begins with Pride and humility. He observes, that the objects which excite these passions, are very numerous, and seemingly very different from each other. Pride or self-esteem may arise from the

qualities of the mind; wit, good-sense, learning, courage, integrity: from those of the body; beauty, strength, agility, good mein, address in dancing, riding, fencing: from external advantages; country, family, children, relations, riches, houses, gardens, horses, dogs, cloaths. He afterwards proceeds to find out that common circumstance, in which all these objects agree, and which causes them to operate on the passions. His theory likewise extends to love and hatred, and other affections. As these questions, tho' curious, could not be rendered intelligible without a long discourse, we shall here omit them.

IT may perhaps be more acceptable to the reader to be informed of what our author says concerning free-will. He has laid the foundation of his doctrine in what he said concerning cause and effect, as above explained.

" 'Tis universally acknowledged, that the operations of external bodies are necessary, and that in the communication of their motion, in their attraction and mutual cohesion, there are not the least traces of indifference or liberty."

—

"Whatever therefore is in this respect on the same footing with matter, must be acknowledged to be necessary. That we may know whether this be the case with the actions of the mind, we may examine matter, and consider on what the idea of a necessity in its operations are founded, and why we conclude one body or action to be the infallible cause of another."

"It has been observed already, that in no single instance the ultimate connexion of any object is discoverable either by our senses or reason, and that we can never penetrate so far into the essence and construction of bodies, as to perceive the principle on which their mutual influence is founded. 'Tis their constant union alone, with which we are acquainted; and 'tis from the constant union the necessity arises, when the mind is determined to pass from one object to its usual attendant, and infer the

existence of one from that of the other. Here then are two particulars, which we are to regard as essential to necessity, viz. the constant union and the inference of the mind, and wherever we discover these we must acknowledge a necessity."

Now nothing is more evident than the constant union of particular actions with particular motives. If all actions be not constantly united with their proper motives, this uncertainty is no more than what may be observed every day in the actions of matter, where by reason of the mixture and uncertainty of causes, the effect is often variable and uncertain. Thirty grains of opium will kill any man that is not accustomed to it; tho' thirty grains of rhubarb will not always purge him. In like manner the fear of death will always make a man go twenty paces out of his road; tho' it will not always make him do a bad action.

AND as there is often a constant conjunction of the actions of the will with their motives, so the inference from the one to the other is often as certain as any reasoning concerning bodies: and there is always an inference proportioned to the constancy of the conjunction. On this is founded our belief in witnesses, our credit in history, and indeed all kinds of moral evidence, and almost the whole conduct of life.

OUR author pretends, that this reasoning puts the whole controversy in a new light, by giving a new definition of necessity. And, indeed, the most zealous advocates for freewill must allow this union and inference with regard to human actions. They will only deny, that this makes the whole of necessity. But then they must shew, that we have an idea of something else in the actions of matter; which, according to the foregoing reasoning, is impossible.

THRO' this whole book, there are great pretensions to new discoveries in philosophy; but if any thing can intitle the author to so glorious a name as that of an inventor, 'tis the use he makes of the principle of the association

of ideas, which enters into most of his philosophy. Our imagination has a great authority over our ideas; and there are no ideas that are different from each other, which it cannot separate, and join, and compose into all the varieties of fiction. But notwithstanding the empire of the imagination, there is a secret tie or union among particular ideas, which causes the mind to conjoin them more frequently together, and makes the one, upon its appearance, introduce the other. Hence arises what we call the apropos of discourse: hence the connection of writing: and hence that thread, or chain of thought, which a man naturally supports even in the loosest reverie. These principles of association are reduced to three, viz. Resemblance; a picture naturally makes us think of the man it was drawn for. Contiguity; when St. Dennis is mentioned, the idea of Paris naturally occurs. Causation; when we think of the son, we are apt to carry our attention to the father. ‘Twill be easy to conceive of what vast consequence these principles must be in the science of human nature, if we consider, that so far as regards the mind, these are the only links that bind the parts of the universe together, or connect us with any person or object exterior to ourselves. For as it is by means of thought only that any thing operates upon our passions, and as these are the only ties of our thoughts, they are really to us the cement of the universe, and all the operations of the mind must, in a great measure, depend on them.

FINIS.

Leibnitz (1837) by Georg Wilhelm Friedrich Hegel

From 'Lectures on the History of Philosophy'

Translated by Elizabeth Sanderson Haldane

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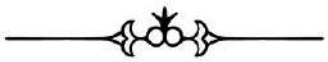
Portrait of Hegel by Jakob Schlesinger, 1831

CHAPTER I. The Metaphysics of the Understanding — C. THIRD SECTION.

THE THIRD DEVELOPMENT of the philosophy of the understanding is that represented by Leibnitz and Wolff. If Wolff's metaphysics is divested of its rigid form, we have as a result the later popular philosophy.

1. LEIBNITZ.



AS IN OTHER respects Leibnitz represents the extreme antithesis to Newton, so in respect of philosophy he presents a striking contrast to Locke and his empiricism, and also to Spinoza. He upholds thought as against the perception of the English school, and in lieu of sensuous Being he maintains Being for thought to be the essence of truth, just as Boehme at an earlier time upheld implicit Being. While Spinoza asserted the universality, the oneness of substance merely, and while with Locke we saw infinite determinations made the basis, Leibnitz, by means of his fundamental principle of individuality, brings out the essentiality of the opposite aspect of Spinoza's philosophy, existence for self, the monad, but the monad regarded as the absolute Notion, though perhaps not yet as the "I." The opposed principles, which were forced asunder, find their completion in each other, since Leibnitz's principle of individuation completed Spinoza's system as far as outward aspect goes.

Gottfried Wilhelm, Baron von Leibnitz, was born in 1646 at Leipzig, where his father was professor of Philosophy. The subject that he studied in view of a profession was jurisprudence, but first, in accordance with the fashion of the day, he made a study of Philosophy, and to it he devoted particular attention. To begin with, he picked up in Leipzig a large and miscellaneous stock of knowledge, then he studied Philosophy and mathematics at Jena under the mathematician and theosophist Weigel, and took his degree of Master of Philosophy in Leipzig. There also, on the occasion of his graduation as Doctor of Philosophy, he defended certain philosophical theses, some of which discourses are still contained in his works (ed. Dutens, T. II. P. I.). His first dissertation, and that for which he obtained the degree of doctor of philosophy, was: *De principio individui*, —

a principle which remained the abstract principle of his whole philosophy, as opposed to that of Spinoza. After he had acquired a thorough knowledge of the subject, he wished to graduate also as Doctor of Laws. But though he died an imperial councillor, it was his ill fortune to receive from the Faculty at Leipzig a refusal to confer the doctorate upon him, his youth being the alleged reason. Such a thing could scarcely happen now-a-days. It may be that it was done because of his over-great philosophical attainments, seeing that lawyers are wont to hold the same in horror. He now quitted Leipzig, and betook himself to Altdorf, where he graduated with distinction. Shortly afterwards he became acquainted in Nürnberg with a company of alchemists, with whose ongoings he became associated. Here he made extracts from alchemistic writings, and studied the mysteries of this occult science. His activity in the pursuit of learning extended also to historical, diplomatic, mathematical and philosophical subjects. He subsequently entered the service of the Elector of Mayence, becoming a member of council, and in 1672 he was appointed tutor to a son of Von Boineburg, Chancellor of State to the Elector. With this young man he travelled to Paris, where he lived for four years. He at this time made the acquaintance of the great mathematician Huygens, and was by him for the first time properly introduced into the domain of mathematics. When the education of his pupil was completed, and the Baron Von Boineburg died, Leibnitz went on his own account to London, where he became acquainted with Newton and other scholars, at whose head was Oldenburg, who was also on friendly terms with Spinoza. After the death of the Elector of Mayence, the salary of Leibnitz ceased to be paid; he therefore left England and returned to France. The Duke of Brunswick-Lüneburg then took him into his service, and gave him the appointment of councillor and librarian at Hanover, with permission to spend as much time as he liked in foreign countries. He therefore remained for some time longer in France, England, and Holland. In the year

1677 he settled down in Hanover, where he became busily engaged in affairs of state, and was specially occupied with historical matters. In the Harz Mountains he had works constructed for carrying off the floods which did damage to the mines there. Notwithstanding these manifold occupations he invented the differential calculus in 1677, on occasion of which there arose a dispute between him and Newton, which was carried on by the latter and the Royal Society of London in a most ungenerous manner. For it was asserted by the English, who gave themselves the credit of everything, and were very unfair to others, that the discovery was really made by Newton. But Newton's *Principia* only appeared later, and in the first edition indeed Leibnitz was mentioned with commendation in a note which was afterwards omitted. From his headquarters in Hanover, Leibnitz, commissioned by his prince, made several journeys through Germany, and also went to Italy in order to collect historical evidence relative to the House of Este, and for the purpose of proving more clearly the relationship between this princely family and that of Brunswick-Lüneburg. At other times he was likewise much occupied with historical questions. Owing to his acquaintance with the consort of Frederick I. of Prussia, Sophia Charlotte, a Hanoverian princess, he was enabled to bring about the foundation of an Academy of Science in Berlin, in which city he lived for a considerable time. In Vienna he also became acquainted with Prince Eugène, which occasioned his being appointed finally an Imperial Councillor. He published several very important historical works as the result of this journey. His death took place at Hanover in 1716, when he was seventy years of age.

It was not only on Philosophy, but also on the most varied branches of science that Leibnitz expended toil and trouble and energy; it was to mathematics, however, that he specially devoted his attention, and he is the inventor of the methods of the integral and differential calculus. His great services in regard to mathematics and physics we here leave out of

consideration, and pay attention to his philosophy alone. None of his books can be exactly looked on as giving a complete systematic account of his philosophy. To the more important among them belongs his work on the human understanding (*Nouveaux essais sur l'entendement humain*) in reply to Locke; but this is a mere refutation. His philosophy is therefore scattered through various little treatises which were written in very various connections, in letters, and replies to objections which caused him to bring out one aspect of the question more strongly than another; we consequently find no elaborated systematic whole, superintended or perfected by him. The work which has some appearance of being such, his *Théodicée*, better known to the public than anything else he wrote, is a popular treatise which he drew up for Queen Sophia Charlotte in reply to Bayle, and in which he took pains not to present the matter in very speculative form. A Wurtemberg theologian, Pfaff by name, and others who were correspondents of Leibnitz and were themselves only too well versed in philosophy, brought it as a charge against Leibnitz — a charge which he never denied — that his philosophy was written in popular form. They laughed very much afterwards at Wolff, who had taken them to be quite in earnest; his opinion was that if Leibnitz were not perfectly serious in this sense with his *Théodicée*, yet he had unconsciously written his best therein. Leibnitz's *Théodicée* is not what we can altogether appreciate; it is a justification of God in regard to the evil in the world. His really philosophic thoughts are most connectedly expressed in a treatise on the principles of Grace (*Principes de la Nature et de la Grace*), and especially in the pamphlet addressed to Prince Eugène of Savoy. Buhle (Geschichte der neuern Philosophie, vol. iv. section 1,) says: "His philosophy is not so much the product of free, independent, original speculation, as the result of well-tested earlier" and later "systems, an eclecticism whose defects he

tried to remedy in his own way. It is a desultory treatment of Philosophy in letters."

Leibnitz followed the same general plan in his philosophy as the physicists adopt when they advance a hypothesis to explain existing data. He has it that general conceptions of the Idea are to be found, from which the particular may be derived; here, on account of existing data, the general conception, for example the determination of force or matter furnished by reflection, must have its determinations disposed in such a way that it fits in with the data. Thus the philosophy of Leibnitz seems to be not so much a philosophic system as an hypothesis regarding the existence of the world, namely how it is to be determined in accordance with the metaphysical determinations and the data and assumptions of the ordinary conception, which are accepted as valid — thoughts which are moreover propounded without the sequence pertaining to the Notion and mainly in narrative style, and which taken by themselves show no necessity in their connection. Leibnitz's philosophy therefore appears like a string of arbitrary assertions, which follow one on another like a metaphysical romance; it is only when we see what he wished thereby to avoid that we learn to appreciate its value. He really makes use of external reasons mainly in order to establish relations: "Because the validity of such relations cannot be allowed, nothing remains but to establish the matter in this way." If we are not acquainted with these reasons, this procedure strikes us as arbitrary.

a. Leibnitz's philosophy is an idealism of the intellectuality of the universe; and although from one point of view he stands opposed to Locke, as from another point of view he is in opposition to the Substance of Spinoza, he yet binds them both together again. For, to go into the matter more particularly, on the one hand he expresses in the many monads the absolute nature of things distinguished and of individuality; on the other hand, in contrast to this and apart from it, he expresses the ideality of

Spinoza and the non-absolute nature of all difference, as the idealism of the popular conception. Leibnitz's philosophy is a metaphysics, and in sharp contrast to the simple universal Substance of Spinoza, where all that is determined is merely transitory, it makes fundamental the absolute multiplicity of individual substances, which after the example of the ancients he named monads — an expression already used by the Pythagoreans. These monads he then proceeds to determine as follows.

Firstly "Substance is a thing that is capable of activity, it is compound or simple, the compound cannot exist without the simple. The monads are simple substances." The proof that they constitute the truth in all things is very simple, it is a superficial reflection. For instance, one of Leibnitz's maxims is "Because there are compound things, the principles of the same must be simple, for the compound consists of the simple." This proof is poor enough, it is an example of the favourite way of starting from something definite, say the compound, and then drawing conclusions therefrom as to the simple. It is quite light in a way, but really it is tautology. Of course, if the compound exists, so does the simple, for the compound means something in itself manifold whose connection or unity is external. From the very trivial category of the compound it is easy to deduce the simple. It is a conclusion drawn from a certain premiss, but the question is whether the premiss is true. These monads are not, however, something abstract and simple in itself, like the empty Epicurean atoms, which, as they were in themselves lacking in determination, drew all their determination from their aggregation alone. The monads are, on the contrary, substantial forms, a good expression, borrowed from the Scholastics (*supra*,), or the metaphysical points of the Alexandrian School (Vol II.), they are the entelechies of Aristotle taken as pure activity, which are forms in themselves (Vol II. p, 182, 183). "These monads are not material or extended, nor do they originate or decay in the natural fashion,

for they can begin only by a creative act of God, and they can end only by annihilation." Thereby they are distinguished from the atoms, which are regarded simply as principles. The expression creation we are familiar with from religion, but it is a meaningless word derived from the ordinary conception; in order to be a thought and to have philosophic significance, it must be much more closely defined.

Secondly: "On account of their simplicity the monads are not susceptible of alteration by another monad in their inner essence; there is no causal connection between them." Each of them is something indifferent and independent as regards the rest, otherwise it would not be an entelechy. Each of them is so much for itself that all its determinations and modifications go on in itself alone, and no determination from without takes place. Leibnitz says: "There are three ways in which substances are connected: (1) Causality, influence; (2) The relation of assistance; (3) The relation of harmony. The relation of influence is a relation pertaining to a commonplace or popular philosophy. But as it is impossible to understand how material particles or immaterial qualities can pass from one substance into another, such a conception as this must be abandoned." If we accept the reality of the many, there can be no transition at all; each is an ultimate and absolutely independent entity. "The system of assistance," according to Descartes, "is something quite superfluous, a *Deus ex machina*, because continual miracles in the things of nature are assumed." If we, like Descartes, assume independent substances, no causal nexus is conceivable; for this presupposes an influence, a bearing of the one upon the other, and in this way the other is not a substance. "Therefore there remains only harmony, a unity which is in itself or implicit. The monad is therefore simply shut up in itself, and cannot be determined by another; this other cannot be set into it. It can neither get outside itself, nor can others get inside it." That is also Spinoza's way of regarding matters: each attribute

entirely represents the essence of God for itself, extension and thought have no influence on each other.

In the third place, “however, these monads must at the same time have certain qualities or determinations in themselves, inner actions, through which they are distinguished from others. There cannot be two things alike, for otherwise they would not be two, they would not be different, but one and the same.” Here then Leibnitz’s axiom of the undistinguishable comes into words. What is not in itself distinguished is not distinguished. This may be taken in a trivial sense, as that there are not two individuals which are alike. To such sensuous things the maxim has no application, it is *prima facie* indifferent whether there are things which are alike or not; there may also be always a difference of space. This is the superficial sense, which does not concern us. The more intimate sense is, however, that each thing is in itself something determined, distinguishing itself from others implicitly or in itself. Whether two things are like or unlike is only a comparison which we make, which falls within our ken. But what we have further to consider is the determined difference in themselves. The difference must be a difference in themselves, not for our comparison, for the subject must have the difference as its own peculiar characteristic or determination, *i.e.* the determination must be immanent in the individual. Not only do we distinguish the animal by its claws, but it distinguishes itself essentially thereby, it defends itself, it preserves itself. If two things are different only in being two, then each of them is one; but the fact of their being two does not constitute a distinction between them; the determined difference in itself is the principal point.

Fourthly: “The determinateness and the variation thereby established is, however, an inward implicit principle; it is a multiplicity of modifications, of relations to surrounding existences, but a multiplicity which remains locked up in simplicity. Determinateness and variation such as this, which

remains and goes on in the existence itself, is a perception;" and therefore Leibnitz says all monads perceive or represent (for we may translate *perceptio* by representation [Vorstellung]). In other words, they are in themselves universal, for universality is just simplicity in multiplicity, and therefore a simplicity which is at the same time change and motion of multiplicity. This is a very important determination; in substance itself there is negativity, determinateness, without its simplicity and its implicitude being given up. Further, in it there is this idealism, that the simple is something in itself distinguished, and in spite of its variation, that it yet remains one, and continues in its simplicity. An instance of this is found in "I," my spirit. I have many conceptions, a wealth of thought is in me, and yet I remain one, notwithstanding this variety of state. This identity may be found in the fact that what is different is at the same time abrogated, and is determined as one; the monads are therefore distinguished by modifications in themselves, but not by external determinations. These determinations contained in the monads exist in them in ideal fashion; this ideality in the monad is in itself a whole, so that these differences are only representations and ideas. This absolute difference is what is termed the Notion; what falls asunder in the mere representation is held together. This is what possesses interest in Leibnitz's philosophy. Such ideality in the same way pertains to the material, which is also a multiplicity of monads; therefore the system of Leibnitz is an intellectual system, in accordance with which all that is material has powers of representation and perception. As thus representing, the monad, says Leibnitz, possesses activity; for activity is to be different, and yet to be one, and this is the only true difference. The monad not only represents, it also changes; but in doing so, it yet remains in itself absolutely what it is. This variation is based on activity. "The activity of the inner principle, by means of which it passes from one perception to another, is desire (*appetitus*)." Variation in representation is desire, and that constitutes

the spontaneity of the monad; all is now complete in itself, and the category of influence falls away. Indeed, this intellectuality of all things is a great thought on the part of Leibnitz: “All multiplicity is included in unity;” determination is not a difference in respect of something else, but reflected into itself, and maintaining itself. This is one aspect of things, but the matter is not therein complete; it is equally the case that it is different in respect of other things.

Fifthly: These representations and ideas are not necessarily conscious representations and ideas, any more than all monads as forming representations are conscious. It is true that consciousness is itself perception, but a higher grade of the same; perceptions of consciousness Leibnitz calls apperceptions. The difference between the merely representing and the self-conscious monads Leibnitz makes one of degrees of clearness. The expression representation has, however, certainly something awkward about it, since we are accustomed to associate it only with consciousness, and with consciousness as such; but Leibnitz admits also of unconscious representation. When he then adduces examples of unconscious representations, he appeals to the condition of a swoon or of sleep, in which we are mere monads: and that representations without consciousness are present in such states he shows from the fact of our having perceptions immediately after awakening out of sleep, which shows that others must have been there, for one perception arises only out of others. That is a trivial and empirical demonstration.

Sixthly: These monads constitute the principle of all that exists. Matter is nothing else than their passive capability. This passive capability it is which constitutes the obscurity of the representations, or a confusion which never arrives at distinction, or desire, or activity. That is a correct definition of the conception; it is Being, matter, in accordance with the moment of simplicity. This is implicitly activity; “mere implicitness without

actualization" would therefore be a better expression. The transition from obscurity to distinctness Leibnitz exemplifies by the state of swooning.

Seventhly: Bodies as bodies are aggregates of monads: they are mere heaps which cannot be termed substances, any more than a flock of sheep can bear this name. The continuity of the same is an arrangement or extension, but space is nothing in itself; it is only in another, or a unity which our understanding gives to that aggregate.

b. Leibnitz goes on to determine and distinguish more clearly as the principal moments, inorganic, organic, and conscious monads, and he does it in the following way.

α. Such bodies as have no inner unity, whose elements are connected merely by space, or externally, are inorganic; they have not an entelechy or one monad which rules over the rest. The continuity of space as a merely external relation has not the Notion in itself of the likeness of these monads in themselves. Continuity is in fact to be regarded in them as an arrangement, a similarity in themselves. Leibnitz therefore defines their movements as like one another, as a harmony in themselves; but again, this is as much as saying that their similarity is not in themselves. In fact continuity forms the essential determination of the inorganic; but it must at the same time not be taken as something external or as likeness, but as penetrating or penetrated unity, which has dissolved individuality in itself like a fluid. But to this point Leibnitz does not attain, because for him monads are the absolute principle, and individuality does not annul itself.

β. A higher degree of Being is found in bodies with life and soul, in which one monad has dominion over the rest. The body which is bound up with the monad, of which the one monad is the entelechy or soul, is with this soul named a living creature, an animal. One such entelechy rules over the rest, yet not really, but formally: the limbs of this animal, however, are again themselves such living things, each of which has in its turn its ruling

entelechy within it. But ruling is here an inappropriate expression. To rule in this case is not to rule over others, for all are independent; it is therefore only a formal expression. If Leibnitz had not helped himself out with the word rule, and developed the idea further, this dominant monad would have abrogated the others, and put them in a negative position; the implicitness of the other monads, or the principle of the absolute Being of these points or individuals would have disappeared. Yet we shall later on come across this relation of the individuals to one another.

γ. The conscious monad distinguishes itself from the naked (material) monads by the distinctness of the representation. But this is of course only an indefinite word, a formal distinction; it indicates that consciousness is the very thing that constitutes the distinction of the undistinguished, and that distinction constitutes the determination of consciousness. Leibnitz more particularly defined the distinction of man as that "he is capable of the knowledge of necessary and eternal truths," — or that he conceives the universal on the one hand, and on the other what is connected with it; the nature and essence of self-consciousness lies in the universality of the Notions. "These eternal truths rest on two maxims; the one is that of contradiction, the other is that of sufficient reason." The former of these is unity expressed in useless fashion as a maxim, the distinction of the undistinguishable, A = A; it is the definition of thinking, but not a maxim which could contain a truth as content, or it does not express the Notion of distinction as such. The other important principle was, on the other hand: What is not distinguished in thought is not distinguished (). "The maxim of the reason is that everything has its reason," — the particular has the universal as its essential reality. Necessary truth must have its reason in itself in such a manner that it is found by analysis, *i.e.* through that very maxim of identity. For analysis is the very favourite plan of resolving into simple ideas and principles: a resolution which annihilates their relation,

and which therefore in fact forms a transition into the opposite, though it does not have the consciousness of the same, and on that account also excludes the Notion; for every opposite it lays hold of only in its identity. Sufficient reason seems to be a pleonasm; but Leibnitz understood by this aims, final causes (*causæ finales*), the difference between which and the causal nexus or the efficient cause he here brings under discussion.

c. The universal itself, absolute essence, which with Leibnitz is something quite different from the monads, separates itself also into two sides, namely universal Being and Being as the unity of opposites.

α. That universal is God, as the cause of the world, to the consciousness of whom the above principle of sufficient reason certainly forms the transition. The existence of God is only an inference from eternal truths; for these must as the laws of nature have a universal sufficient reason which determines itself as none other than God. Eternal truth is therefore the consciousness of the universal and absolute in and for itself; and this universal and absolute is God, who, as one with Himself, the monad of monads, is the absolute *Monas*. Here we again have the wearisome proof of His existence: He is the fountain of eternal truths and Notions, and without Him no potentiality would have actuality; He has the prerogative of existing immediately in His potentiality. God is here also the unity of potentiality and actuality, but in an uncomprehending manner; what is necessary, but not comprehended, is transferred to Him. Thus God is at first comprehended chiefly as universal, but already in the aspect of the relation of opposites.

β. As regards this second aspect, the absolute relation of opposites, it occurs in the first place in the form of absolute opposites of thought, the good and the evil. “God is the Author of the world,” says Leibnitz; that refers directly to evil. It is round this relation that philosophy specially revolves, but to the unity of which it did not then attain; the evil in the world was not comprehended, because no advance was made beyond the

fixed opposition. The result of Leibnitz's Théodicée is an optimism supported on the lame and wearisome thought that God, since a world had to be brought into existence, chose out of infinitely many possible worlds the best possible — the most perfect, so far as it could be perfect, considering the finite element which it was to contain. This may very well be said in a general way, but this perfection is no determined thought, but a loose popular expression, a sort of babble respecting an imaginary or fanciful potentiality; Voltaire made merry over it. Nor is the nature of the finite therein defined. Because the world, it is said, has to be the epitome of finite Beings, evil could not be separated from it, since evil is negation, finitude. Reality and negation remain standing in opposition to one another exactly in the same way as before. That is the principal conception in the Théodicée. But something very like this can be said in every-day life. If I have some goods brought to me in the market at some town, and say that they are certainly not perfect, but the best that are to be got, this is quite a good reason why I should content myself with them. But comprehension is a very different thing from this. Leibnitz says nothing further than that the world is good, but there is also evil in it; the matter remains just the same as it was before. "Because it had to be finite" is then a mere arbitrary choice on the part of God. The next question would be: Why and how is there finitude in the Absolute and His decrees? And only then should there be deduced from the determination of finitude the evil which no doubt exists therein.

It is true that Leibnitz has a reply to the above question: "God does not will what is evil; evil comes only indirectly into the results" (blind), "because oftentimes the greater good could not be achieved if evils were not present. Therefore they are means to a good end." But why does not God employ other means? They are always external, not in and for themselves. "A moral evil may not be regarded as a means, nor must we, as the apostle

says, do evil that good may come; yet it has often the relation of a *conditio sine qua non* of the good. Evil is in God only the object of a permissive will (*voluntatis permissivæ*);" but everything that is wrong would be such. "God has therefore among the objects of His will the best possible as the ultimate object, but the good as a matter of choice (*qualemcunque*), also as subordinate; and things indifferent and evils often as means. Evil is, however, an object of His will only as the condition of something otherwise necessary (*rei alioqui debitæ*), which without it could not exist; in which sense Christ said it must needs be that offences come."

In a general sense we are satisfied with the answer: "In accordance with the wisdom of God we must accept it as a fact that the laws of nature are the best possible," but this answer does not suffice for a definite question. What one wishes to know is the goodness of this or that particular law; and to that no answer is given. If, for example, it is said that "The law of falling bodies, in which the relation of time and space is the square, is the best possible," one might employ, as far as mathematics are concerned, any other power whatever. When Leibnitz answers: "God made it so," this is no answer at all. We wish to know the definite reason of this law; such general determinations sound pious, but are not satisfying.

γ. He goes on to say that the sufficient reason has reference to the representation of the monads. The principles of things are monads, of which each is for itself, without having influence on the others. If now the Monad of monads, God, is the absolute substance, and individual monads are created through His will, their substantiality comes to an end. There is therefore a contradiction present, which remains unsolved in itself — that is between the one substantial monad and the many monads for which independence is claimed, because their essence consists in their standing in no relation to one another. Yet at the same time, in order to show the

harmony that exists in the world, Leibnitz understands the relation of monads to monads more generally as the unity of contrasted existences, namely of soul and body. This unity he represents as a relation without difference, and notionless, *i.e.* as a pre-established harmony. Leibnitz uses here the illustration of two clocks, which are set to the same hour, and keep the same time; in the same way the movement of the kingdom of thought goes on, determined in accordance with ends, and the movement onward of the corporeal kingdom which corresponds with it, proceeds according to a general causal connection. The case is the same as with Spinoza, that these two sides of the universe have no connection with each other, the one does not influence the other, but both are entirely indifferent to one another; it is really the differentiating relation of the Notion that is lacking. In abstract thought that is without Notion, that determination now receives the form of simplicity, of implicitude, of indifference with regard to what is other, of a self-reflection that has no movement: in this way red in the abstract is in a position of indifference as regards blue, &c. Here, as before, Leibnitz forsakes his principle of individuation; it has only the sense of being exclusively one, and of not reaching to and including what is other; or it is only a unity of the popular conception, not the Notion of unity. The soul has thus a series of conceptions and ideas which are developed from within it, and this series is from the very first placed within the soul at its creation, *i.e.* the soul is in all immediacy this implicit determination; determination is, however, not implicit, but the reflected unfolding of this determination in the ordinary conception is its outward existence. Parallel with this series of differentiated conceptions, there now runs a series of motions of the body, or of what is external to the soul. Both are essential moments of reality; they are mutually indifferent, but they have also an essential relation of difference.

Since now every monad, as shut up within itself, has no influence upon the body and its movements, and yet the infinite multitude of their atoms correspond with one another, Leibnitz places this harmony in God; a better definition of the relation and the activity of the Monad of monads is therefore that it is what pre-establishes harmony in the changes of the monads. God is the sufficient reason, the cause of this correspondence; He has so arranged the multitude of atoms that the original changes which are developed within one monad correspond with the changes of the others. The pre-established harmony is to be thought of somewhat in this style; when a dog gets a beating, the pain develops itself in him, in like fashion the beating develops itself in itself, and so does the person who administers the beating: their determinations all correspond with one another, and that not by means of their objective connection, since each is independent. The principle of the harmony among the monads does not consequently belong to them, but it is in God, who for that very reason is the Monad of monads, their absolute unity. We saw from the beginning how Leibnitz arrived at this conception. Each monad is really possessed of the power of representation, and is as such a representation of the universe, therefore implicitly the totality of the whole world. But at the same time this representation is not in consciousness; the naked monad is implicitly the universe, and difference is the development of this totality in it. What develops itself therein is at the same time in harmony with all other developments; all is one harmony. “In the universe all things are closely knit together, they are in one piece, like an ocean: the slightest movement transmits its influence far and wide all around.” From a single grain of sand, Leibnitz holds, the whole universe might be comprehended in its entire development — if we only knew the sand grain thoroughly. There is not really much in all this, though it sounds very fine; for the rest of the universe is considerably more than a grain of sand, well though we knew it, and considerably different therefrom. To say

that its essence is the universe is mere empty talk: for the fact is that the universe as essence is not the universe. To the sand grain much must be added which is not present; and since thought adds more than all the grains of sand that exist, the universe and its development may in this way certainly be comprehended. Thus according to Leibnitz every monad has or is the representation of the entire universe, which is the same as saying that it is really representation in general; but at the same time it is a determinate representation, by means of which it comes to be this particular monad, therefore it is representation according to its particular situation and circumstances.

The representations of the monad in itself, which constitute its universe, develop themselves from themselves, as the spiritual element in it, according to the laws of their own activity and desire, just as the movements of their outer world do according to laws of bodies; hence liberty is nothing other than this spontaneity of immanent development, but as in consciousness. The magnetic needle, on the contrary, has only spontaneity without consciousness, and consequently without freedom. For, says Leibnitz, the nature of the magnetic needle is to turn to the north; if it had consciousness it would imagine that this was its self-determination; it would thus have the will to move round in accordance with its nature. But it is clear that in the course of conscious representations there is involved no necessary connection, but contingency and want of sequence are to be found, the reason of this according to Leibnitz (Oper. T. II P. I.) being "because the nature of a created substance implies that it changes incessantly according to a certain order, which order guides it spontaneously (*spontanément*) in all the circumstances which befall it; so that one who sees all things recognizes in the present condition of substance the past also and the future. The law of order, which determines the individuality of the particular substance, has an exact reference to what

takes place in every other substance and in the whole universe." The meaning of this is that the monad is not a thing apart, or that there are two views of it, the one making it out as spontaneously generating its representations, so far as form is concerned, and the other making it out to be a moment of the whole of necessity; Spinoza would call this regarding it from both sides. An organic whole, a human being, is thus for instance the assertion of his aim from out of himself: at the same time the being directed on something else is involved in his Notion. He represents this and that to himself, he wills this and that; his activity employs itself and brings about changes. His inward determination thus becomes corporeal determination, and then change going beyond himself; he appears as cause, influencing other monads. But this Being-for-another is only an appearance. For the other, *i.e.* the actual, in so far as the monad determines it or makes it negative, is the passive element which the monad has in itself: all moments are indeed contained therein, and for that very reason it has no need of other monads, but only of the laws of the monads in itself. But if the Being-for-another is mere appearance, the same may be said of Being-for-self; for this has significance only in reference to Being-for-another.

The important point in Leibnitz's philosophy is this intellectuality of representation which Leibnitz, however, did not succeed in carrying out; and for the same reason this intellectuality is at the same time infinite multiplicity, which has remained absolutely independent, because this intellectuality has not been able to obtain mastery over the One. The separation in the Notion, which proceeds as far as release from itself, or appearance in distinct independence, Leibnitz did not succeed in bringing together into unity. The harmony of these two moments, the course of mental representations and the course of things external, appearing mutually as cause and effect, is not brought by Leibnitz into relation in and for themselves; he therefore lets them fall asunder, although each is passive as

regards the other. He moreover considers both of them in one unity, to be sure, but their activity is at the same time not for themselves. Every forward advance becomes therefore incomprehensible when taken by itself, because the course of the representation as through aims in itself, requires this moment of Other-Being or of passivity; and again the connection of cause and effect requires the universal: each however lacks this its other moment. The unity which according to Leibnitz is to be brought about by the pre-established harmony, namely that the determination of the will of man and the outward change harmonize, is therefore brought about by means of another, if not indeed from without, for this other is God. Before God the monads are not to be independent, but ideal and absorbed in Him.

At this point the demand would come in that in God Himself there should be comprehended the required unity of that which before fell asunder; and God has the special privilege of having laid on Him the burden of what cannot be comprehended. The word of God is thus the makeshift which leads to a unity which itself is only hypothetical; for the process of the many out of this unity is not demonstrated. God plays therefore in the later philosophy a far greater part than in the early, because now the comprehension of the absolute opposition of thought and Being is the chief demand. With Leibnitz the extent to which thoughts advance is the extent of the universe; where comprehension ceases, the universe ceases, and God begins: so that later it was even maintained that to be comprehended was derogatory to God, because He was thus degraded into finitude. In that procedure a beginning is made from the determinate, this and that are stated to be necessary; but since in the next place the unity of these moments is not comprehended, it is transferred to God. God is therefore, as it were, the waste channel into which all contradictions flow: Leibnitz's Théodicée is just a popular summing up such as this. There are, nevertheless, all manner of evasions to be searched out — in the opposition of God's justice and

mercy, that the one tempers the other; how the fore-knowledge of God and human freedom are compatible — all manner of syntheses which never come to the root of the matter nor show both sides to be moments.

These are the main moments of Leibnitz's philosophy. It is a metaphysic which starts from a narrow determination of the understanding, namely, from absolute multiplicity, so that connection can only be grasped as continuity. Thereby absolute unity is certainly set aside, but all the same it is presupposed; and the association of individuals with one another is to be explained only in this way, that it is God who determines the harmony in the changes of individuals. This is an artificial system, which is founded on a category of the understanding, that of the absoluteness of abstract individuality. What is of importance in Leibnitz lies in the maxims, in the principle of individuality and the maxim of indistinguishability.

Gottfried Wilhelm von Leibnitz (1858) by Frederic Henry Hedge

From 'The Atlantic Monthly'

The philosophic import of this illustrious name, having suffered temporary eclipse from the Critical Philosophy, with its swift succession of transcendental dynasties, — the *Wissenschaftslehre*, the *Naturphilosophie*, and the *Encyclopädie*, — has recently emerged into clear and respectful recognition, if not into broad and effulgent repute. In divers quarters, of late, the attention of the learned has reverted to the splendid optimist, whose adventurous intellect left nothing unexplored and almost nothing unexplained. Biographers and critics have discussed his theories, — some in the interest of philosophy, and some in the interest of religion, — some in the spirit of discipleship, and some in the spirit of opposition, — but all with consenting and admiring attestation of the vast erudition and intellectual prowess and unsurpassed capacity[1] of the man.

A collection of all the works appertaining to Leibnitz, with all his own writings, would make a respectable library. We have no room for the titles of all, even of the more recent of these publications. We content ourselves with naming the Biography, by G. G. Guhrauer, the best that has yet appeared, called forth by the celebration, in 1846, of the ducentesimal birthday of Leibnitz, — the latest edition of his Philosophical Works, by Professor Erdmann of Halle — the publication of his Correspondence with Arnauld, by Herr Grotefend, and of that with the Landgrave Ernst von Hessen Rheinfels, by Chr. von Rommel, — of his Historical Works, by the librarian Pertz of Berlin, — of the Mathematical, by Gerhardt, — Ludwig Jeuerbach's elaborate dissertation, "Darstellung, Entwickelung und Kritik

der Leibnitzischen Philosophie," — Zimmermann's "Leibnitz u. Herbart's Monadologie," — Schelling's "Leibnitz als Denker," — Hartenstein's "De Materiae apud Leibnit. Notione," — and Adolph Helferich's "Spinoza u. Leibnitz: oder Das Wesen des Idealismus u. des Realismus." To these we must add, as one of the most valuable contributions to Leibnitian literature, M. Foucher de Careil's recent publication of certain MSS. of Leibnitz, found in the library at Hanover, containing strictures on Spinoza, (which the editor takes the liberty to call "Refutation Inédite de Spinoza,")— "Sentiment de Worcester et de Locke sur les Idées,"— "Correspondance avec Foucher, Bayle et Fontenelle,"— "Reflexions sur l'Art de connaître les Homines,"— "Fragmens Divers," etc.[2], accompanied by valuable introductory and critical essays.

M. de Careil complains that France has done so little for the memory of a man "qui lui a fait l'honneur d'écrire les deux tiers de ses oeuvres en Français." England does not owe him the same obligations, and England has done far less than France, — in fact, nothing to illustrate the memory of Leibnitz; not so much as an English translation of his works, or an English edition of them, in these two centuries. Nor have M. de Careil's countrymen in times past shared all his enthusiasm for the genial Saxon. The barren Psychology of Locke obtained a currency in France, in the last century, which the friendly Realism of his great contemporary could never boast. Raspe, the first who edited the "Nouveaux Essais," takes to himself no small credit for liberality in so doing, and hopes, by rendering equal justice to Leibnitz and to Locke, to conciliate those "who, with the former, think that their wisdom is the sure measure of omnipotence,"[3] and those who "believe, with the latter, that the human mind is to the rays of the primal Truth what a night-bird is to the sun."[4]

Voltaire pronounced him "le savant le plus universel de l'Europe," but characterized his metaphysical labors with the somewhat equivocal

compliment of “metaphysicien assez délié pour vouloir réconcilier la théologie avec la métaphysique.”[5]

Germany, with all her wealth of erudite celebrities, has produced no other who fulfils so completely the type of the Gelehrte, — a type which differs from that of the *savant* and from that of the scholar, but includes them both. Feuerbach calls him “the personified thirst for Knowledge”; Frederic the Great pronounced him an “Academy of Sciences”; and Fontenelle said of him, that “he saw the end of things, or that they had no end.” It was an age of intellectual adventure into which Leibnitz was born, — fit sequel and heir to the age of maritime adventure which preceded it. We please ourselves with fancied analogies between the two epochs and the nature of their discoveries. In the latter movement, as in the former, Italy took the lead. The martyr Giordano Bruno was the brave Columbus of modern thought, — the first who broke loose from the trammels of mediaeval ecclesiastical tradition, and reported a new world beyond the watery waste of scholasticism. Campanella may represent the Vespucci of the new enterprise; Lord Bacon its Sebastian Cabot, — the “Novum Organum” being the Newfoundland of modern experimental science. Des Cartes was the Cortés, or shall we rather say the Ponce de Leon, of scientific discovery, who, failing to find what he sought, — the Principle of Life, (the Fountain of Eternal Youth,) — yet found enough to render his name immortal and to make mankind his debtor. Spinoza is the spiritual Magalhaens, who, emerging from the straits of Judaism, beheld

“Another ocean’s breast immense, unknown.”

Of modern thinkers he was

—— — “the first
That ever burst
Into that silent sea.”

He discovered the Pacific of philosophy, — that theory of the sole Divine Substance, the All-One, which Goethe in early life found so pacifying to his troubled spirit, and which, vague and barren as it proves on nearer acquaintance, induces at first, above all other systems, a sense of repose in illimitable vastness and immutable necessity.

But the Vasco de Gama of his day was Leibnitz. His triumphant optimism rounded the Cape of theological Good Hope. He gave the chief impulse to modern intellectual commerce. Full freighted, as he was, with Western thought, he revived the forgotten interest in the Old and Eastern World, and brought the ends of the earth together. Circumnavigator of the realms of mind, wherever he touched, he appeared as discoverer, as conqueror, as lawgiver. In mathematics, he discovered or invented the Differential Calculus, — the logic of transcendental analysis, the infallible method of astronomy, without which it could never have compassed the large conclusions of the "Mecanique Celeste." In his "Protogaea," published in 1693, he laid the foundation of the science of Geology. From his observations, as Superintendent of the Hartz Mines, and those which he made in his subsequent travels through Austria and Italy, — from an from an examination of the layers, in different localities, of the earth's crust, he deduced the first theory, in the geological sense, which has ever been propounded, of the earth's formation. Orthodox Lutheran as he was, he braved the theological prejudices which then, even more than now, affronted scientific inquiry in that direction. "First among men," says Flourens, "he demonstrated the two agencies which successively have formed and reformed the globe, — fire and water." In the region of metaphysical inquiry, he propounded a new and original theory of Substance, and gave to philosophy the Monad, the Law of Continuity, the Preëstablished Harmony, and the Best Possible World.

Born at Leipzig, in 1646, — left fatherless at the age of six years, — by the care of a pious mother and competent guardians, young Leibnitz enjoyed such means of education as Germany afforded at that time, but declares himself, for the most part, self-taught.[6]

So genius must always be, for want of any external stimulus equal to its own impulse. No normal training could keep pace with his abnormal growth. No school discipline could supply the fuel necessary to feed the consuming fire of that ravenous intellect. Grammars, manuals, compends, — all the apparatus of the classes, — were only oil to its flame. The Master of the Nicolai-Schule in Leipzig, his first instructor, was a steady practitioner of the Martinet order. The pupils were ranged in classes corresponding to their civil ages, — their studies graduated according to the baptismal register. It was not a question of faculty or proficiency, how a lad should be classed and what he should read, but of calendar years. As if a shoemaker should fit his last to the age instead of the foot. Such an age, such a study. Gottfried is a genius, and Hans is a dunce; but Gottfried and Hans were both born in 1646; consequently, now, in 1654, they are both equally fit for the Smaller Catechism. Leibnitz was ready for Latin long before the time allotted to that study in the Nicolai-Schule, but the system was inexorable. All access to books cut off by rigorous proscription. But the thirst for knowledge is not easily stifled, and genius, like love, “will find out his way.”

He chanced, in a corner of the house, to light on an odd volume of Livy, left there by some student boarder. What could Livy do for a child of eight years, with no previous knowledge of Latin, and no lexicon to interpret between them? For most children, nothing. Not one in a thousand would have dreamed of seriously grappling with such a mystery. But the brave Patavinian took pity on our little one and yielded something to childish importunity. The quaint old copy was garnished, according to a fashion of

the time, with rude wood-cuts, having explanatory legends underneath. The young philologer tugged at these until he had mastered one or two words. Then the book was thrown by in despair as impracticable to further investigation. Then, after one or two weeks had elapsed, for want of other employment, it was taken up again, and a little more progress made. And so by degrees, in the course of a year, a considerable knowledge of Latin had been achieved. But when, in the Nicolai order, the time for this study arrived, so far from being pleased to find his instructions anticipated, or welcoming such promise of future greatness, — so far from rejoicing in his pupil's proficiency, the pedagogue chafed at the insult offered to his system by this empiric antepast. He was like one who suddenly discovers that he is telling an old story where he thought to surprise with a novelty; or like one who undertakes to fill a lamp, which, being (unknown to him) already full, runs over, and his oil is spilled. It was "oleum perdidit" in another sense than the scholastic one. Complaint was made to the guardians of the orphan Gottfried of these illicit visits to the tree of knowledge. Severe prohibitory measures were recommended, which, however, judicious counsel from another quarter happily averted.

At the age of eleven, Leibnitz records, that he made, on one occasion, three hundred Latin verses without elision between breakfast and dinner. A hundred hexameters, or fifty distichs, in a day, is generally considered a fair *pensum* for a boy of sixteen at a German gymnasium.

At the age of seventeen, he produced, as an academic exercise, on taking the degree of Bachelor of Philosophy, his celebrated treatise on the Principle of Individuality, "De Principle Individui," the most extraordinary performance ever achieved by a youth of that age, — remarkable for its erudition, especially its intimate knowledge of the writings of the Schoolmen, and equally remarkable for its vigorous grasp of thought and its subtile analysis. In this essay Leibnitz discovered the bent of his mind and

prefigured his future philosophy, in the choice of his theme, and in his vivid appreciation and strenuous positing of the individual as the fundamental principle of ontology. He takes Nominalistic ground in relation to the old controversy of Nominalist and Realist, siding with Abelard and Roscellin and Occam, and against St. Thomas and Duns Scotus. The principle of individuation, he maintains, is the entire entity of the individual, and not mere limitation of the universal, whether by "Existence" or by "*Haecceity*."[7] John and Thomas are individuals by virtue of their integral humanity, and not by fractional limitation of humanity. Dobbin is an actual positive horse (*Entitas tota*). Not a negation, by limitation, of universal equiety (*Negatio*). Not an individuation, by actual existence, of a non-existent but essential and universal horse (*Existentia*). Nor yet a horse only by limitation of kind, — a horse minus Dick and Bessie and the brown mare, etc. (*Haecceitas*). But an individual horse, simply by virtue of his equine nature. Only so far as he is an actual complete horse, is he an individual at all. (*Per quod quid est, per id unum numero est*.) His individuality is nothing superadded to his equiety. (*Unum supra ens nihil addit reale*.) Neither is it anything subtracted therefrom. (*Negatio non potest producere accidentia individualia*.) In fine, there is and can be no horse but actual individual horses. (*Essentia et existentia non possunt separari*.)

This was the doctrine of the Nominalists, as it was of Aristotle before them. It was the doctrine of the Reformers, except, if we remember rightly, of Huss. The University of Leipzig was founded upon it. It is the current doctrine of the present day, and harmonizes well with the current Materialism. Not that Nominalism in itself, and as Leibnitz held it, is necessarily materialistic, but Realism is essentially antimaterialistic. The Realists held with Plato, — but not in his name, for they, too, claimed to be Aristotelian, and preëminently so, — that the ideal must precede the actual.

So far they were right. This was their strong point. Their error lay in claiming for the ideal an objective reality, an independent being. Conceptualism was only another statement of Nominalism, or, at most, a question of the relation of language to thought. It cannot be regarded as a third issue in this controversy, — a controversy in which more time was consumed, says John of Salisbury, "than the Caesars required to make themselves masters of the world," and in which the combatants, having spent at last their whole stock of dialectic ammunition, resorted to carnal weapons, passing suddenly, by a very illogical *metabasis*, from "universals" to particulars. Both parties appealed to Aristotle. By a singular fortune, a pagan philosopher, introduced into Western Europe by Mohammedans, became the supreme authority of the Christian world. Aristotle was the Scripture of the Middle Age. Luther found this authority in his way and disposed of it in short order, devoting Aristotle without ceremony to the Devil, as "a damned mischief-making heathen." But Leibnitz, whose large discourse looked before as well as after, reinstated not only Aristotle, but Plato, and others of the Greek philosophers, in their former repute;— "Car ces anciens," he said, "étaient plus solides qu'on ne croit." He was the first to turn the tide of popular opinion in their favor.

Not without a struggle was he brought to side with the Nominalists. Musing, when a boy, in the Rosenthal, near Leipzig, he debated long with himself,— "Whether he would give up the Substantial Forms of the Schoolmen." Strange matter for boyish deliberation! Yes, good youth, by all means, give them up! They have had their day. They served to amuse the imprisoned intellect of Christendom in times of ecclesiastical thraldom, when learning knew no other vocation. But the age into which you are born has its own problems, of nearer interest and more commanding import. The measuring-reed of science is to be laid to the heavens, the solar system is to be weighed in a balance; the age of logical quiddities has passed, the age of

mathematical quantities has come. Give them up! You will soon have enough to do to take care of your own. What with Dynamics and Infinitesimals, Pasigraphy and Dyadik, Monads and Majesties, Concilium Ægyptiacum and Spanish Succession and Hanoverian cabals, there will be scant room in that busy brain for Substantial Forms. Let them sleep, dust to dust, with the tomes of Duns Scotus and the bones of Aquinas!

The "De Principio Individui" was the last treatise of any note in the sense and style of the old scholastic philosophy. It was also one of the last blows aimed at scholasticism, which, long undermined by the Saxon Reformation, received its *coup de grace* a century later from the pen of an English wit. "Cornelius," says the author of "Martinus Scriblerus," told Martin that a shoulder of mutton was an individual; which Crambe denied, for he had seen it cut into commons. 'That's true,' quoth the Tutor, 'but you never saw it cut into shoulders of mutton.' 'If it could be,' quoth Crambe, 'it would be the loveliest individual of the University.' When he was told that a *substance* was that which is subject to *accidents*: 'Then soldiers,' quoth Crambe, 'are the most substantial people in the world.' Neither would he allow it to be a good definition of accident, that it could be present or absent without the destruction of the subject, since there are a great many accidents that destroy the subject, as burning does a house and death a man. But as to that, Cornelius informed him that there was a *natural* death and a *logical* death; and that though a man after his natural death was incapable of the least parish office, yet he might still keep his stall among the logical predicaments.....

Crambe regretted extremely that *Substantial Forms*, a race of harmless beings which had lasted for many years and had afforded a comfortable subsistence to many poor philosophers, should now be hunted down like so many wolves, without the possibility of retreat. He considered that it had gone much harder with them than with the *Essences*, which had retired from

the schools into the apothecaries' shops, where some of them had been advanced into the degree of *Quintessences*. He thought there should be a retreat for poor *substantial forms* amongst the gentlemen-ushers at court; and that there were, indeed, substantial forms, such as forms of prayer and forms of government, without which the things themselves could never long subsist.....

Metaphysics were a large field in which to exercise the weapons which logic had put in their hands. Here Martin and Crambe used to engage like any prizefighters. And as prize-fighters will agree to lay aside a buckler, or some such defensive weapon, so Crambe would agree not to use *simpliciter* and *secundum quid*, if Martin would part with *materialiter* and *formaliter*. But it was found, that, without the defensive armor of these distinctions, the arguments cut so deep that they fetched blood at every stroke. Their theses were picked out of Suarez, Thomas Aquinas, and other learned writers on those subjects..... One, particularly, remains undecided to this day,— 'An præter *esse* reale actualis essentiæ sit alind *esse* necessarium quo res actualiter existat?' In English thus: 'Whether, besides the real being of actual being, there be any other being necessary to cause a thing to be?'[8]

Arrived at maturity, Leibnitz rose at once to classic eminence. He became a conspicuous figure, he became a commanding power, not only in the intellectual world, of which he constituted himself the centre, but in part also of the civil. It lay in the nature of his genius to prove all things, and it lay in his temperament to seek *rapport* with all sorts of men. He was infinitely related; — not an individual of note in his day but was linked with him by some common interest or some polemic grapple; not a *savant* or statesman with whom Leibnitz did not spin, on one pretence or another, a thread of communication. Europe was reticulated with the meshes of his correspondence. "Never," says Voltaire, "was intercourse among philosophers more universal; *Leibnitz servait à l'animer*." He writes now to

Spinoza at the Hague, to suggest new methods of manufacturing lenses, — now to Magliabecchi at Florence, urging, in elegant Latin verses, the publication of his bibliographical discoveries, — and now to Grimaldi, Jesuit missionary in China, to communicate his researches in Chinese philosophy. He hoped by means of the latter to operate on the Emperor Cham-Hi with the *Dyadik;*[9] and even suggested said *Dyadik* as a key to the cipher of the book "Ye Kim," supposed to contain the sacred mysteries of Fo. He addresses Louis XIV. now on the subject of a military expedition to Egypt, (a magnificent idea, which it needed a Napoleon to realize,) now on the best method of promoting and conserving scientific knowledge. He corresponds with the Landgrave of Hesse-Rheinfels, with Bossuet, and with Madame Brinon on the Union of the Catholic and Protestant Churches, and with Privy-Counsellor von Spanheim on the Union of the Lutheran and Reformed, — with Père Des Bosses on Transubstantiation, and with Samuel Clarke on Time and Space, — with Remond de Montmort on Plato, and with Franke on Popular Education, — with the Queen of Prussia (his pupil) on Free-will and Predestination, and with the Electress Sophia, her mother, (in her eighty-fourth year,) on English Politics, — with the cabinet of Peter the Great on the Slavonic and Oriental Languages, and with that of the German Emperor on the claims of George Lewis to the honors of the Electorate, — and finally, with all the *savans* of Europe on all possible scientific questions.

Of this world-wide correspondence a portion related to the sore subject of his litigated claim to originality in the discovery of the Differential Calculus, — a matter in which Leibnitz felt himself grievously wronged, and complained with justice of the treatment he received at the hands of his contemporaries. The controversy between him and Newton, respecting this hateful topic, would never have originated with either of these illustrious men, had it depended on them alone to vindicate their respective claims.

Officious and ill-advised friends of the English philosopher, partly from misguided zeal and partly from levelled malice, preferred on his behalf a charge of plagiarism against the German, which Newton was not likely to have urged for himself. “The new Calculus, which Europe lauds, is nothing less,” they suggested, “than your fluxionary method, which Mr. Leibnitz has pirated, anticipating its tardy publication by the genuine author. Why suffer your laurels to be wrested from you by a stranger?” Thereupon arose the notorious *Commercium Epistolicum*, in which Wallis, Fatio de Duillier, Collins, and Keill were perversely active. Melancholy monument of literary and national jealousy! Weary record of a vain strife! Ideas are no man’s property. As well pretend to ownership of light, or set up a claim to private estate in the Holy Ghost. The Spirit blows where it lists. Truth inspires whom it finds. He who knows best to conspire with it has it. Both philosophers swerved from their native simplicity and nobleness of soul. Both sinned and were sinned against. Leibnitz did unhandsome things, but he was sorely tried. His heart told him that the right of the quarrel was on his side, and the general stupidity would not see it. The general malice, rejoicing in aspersion of a noble name, would not see it. The Royal Society would not see it, — nor France, until long after Leibnitz’s death. Sir David Brewster’s account of the matter, according to the German authorities, Gerhardt, Guhrauer, and others, is one-sided, and sins by *suppressio veri*, ignoring important documents, particularly Leibnitz’s letter to Oldenburg, August 27, 1676. Gerhardt has published Leibnitz’s own history of the Calculus as a counter-statement.[10] But even from Brewster’s account, as we remember it, (we have it not by us at this writing.) there is no more reason to doubt that Leibnitz’s discovery was independent of Newton’s than that Newton’s was independent of Leibnitz’s. The two discoveries, in fact, are not identical; the end and application are the same, but origin and process differ, and the German method has long superseded the English. The

question in debate has been settled by supreme authority. Leibnitz has been tried by his peers. Euler, Lagrange, Laplace, Poisson, and Biot have honorably acquitted him of plagiarism, and reinstated him in his rights as true discoverer of the Differential Calculus.

The one distinguishing trait of Leibnitz's genius, and the one preëminent fact in his history, was what Feuerbach calls his πολυπραγμοσύνη, which, being interpreted, means having a finger in every pie. We are used to consider him as a man of letters; but the greater part of his life was spent in labors of quite another kind. He was more actor than writer. He wrote only for occasions, at the instigation of others, or to meet some pressing demand of the time. Besides occupying himself with mechanical inventions, some of which (in particular, his improvement of Pascal's Calculating Machine) were quite famous in their day, — besides his project of a universal language, and his labors to bring about a union of the churches, — besides undertaking the revision of the laws of the German Empire, superintending the Hanoverian mines, experimenting in the culture of silk, directing the medical profession, laboring in the promotion of popular education, establishing academies of science, superintending royal libraries, ransacking the archives of Germany and Italy to find documents for his history of the House of Brunswick, a work of immense research,[11] — besides these, and a multitude of similar and dissimilar avocations, he was deep in politics, German and European, and was occupied all his life long with political negotiations. He was a courtier, he was a *diplomat*, was consulted on all difficult matters of international policy, was employed at Hanover, at Berlin, at Vienna, in the public and secret service of ducal, royal, and imperial governments, and charged with all sorts of delicate and difficult commissions, — matters of finance, of pacification, of treaty and appeal. He was Europe's factotum. A complete biography of the man would be an epitome of the history of his time. The number and variety of his

public engagements were such as would have crazed any ordinary brain. And to these were added private studies not less multifarious. “I am distracted beyond all account,” he writes to Vincent Placcius. “I am making extracts from archives, inspecting ancient documents, hunting up unpublished manuscripts; all this to illustrate the history of Brunswick. Letters in great number I receive and write. Then I have so many discoveries in mathematics, so many speculations in philosophy, so many other literary observations, which I am desirous of preserving, that I am often at a loss what to take hold of first, and can fairly sympathize in that saying of Ovid, ‘I am straitened by my abundance.’”[12]

His diplomatic services are less known at present than his literary labors, but were not less esteemed in his own day. When Louis XIV. in 1688, declared war against the German Empire, on the pretence that the Emperor was meditating an invasion of France, Leibnitz drew up the imperial manifesto, which repelled the charge and triumphantly exposed the hollowness of Louis’s cause. Another document, prepared by him at the solicitation, it is supposed, of several of the courts of Europe, advocating the claims of Charles of Austria to the vacant throne of Spain, in opposition to the grandson of Louis, and setting forth the injurious consequences of the policy of the French monarch, was hailed by his contemporaries as a masterpiece of historical learning and political wisdom. By his powerful advocacy of the cause of the Elector of Brandenburg he may be said to have aided the birth of the kingdom of Prussia, whose existence dates with the commencement of the last century. In the service of that kingdom he wrote and published important state-papers; among them, one relating to a point of contested right to which recent events have given fresh significance: “Traité: Sommaire du Droit de Frédéric I. Roi de Prusse à la Souveraineté de Neufchâtel et de Vallengin en Suisse.”

In Vienna, as at Berlin, the services of Leibnitz were subsidized by the State. By the Peace of Utrecht, the house of Habsburg had been defeated in its claims to the Spanish throne, and the foreign and internal affairs of the Austrian government were involved in many perplexities, which, it was hoped, the philosopher's counsel might help to untangle. He was often present at the private meetings of the cabinet, and received from the Emperor the honorable distinction of Kaiserlicher Hofrath, in addition to that, which had previously been awarded to him, of Baron of the Empire. The highest post in the gift of government was open to him, on condition of renouncing his Protestant faith, which, notwithstanding his tolerant feeling toward the Roman Church, and the splendid compensations which awaited such a convertite, he could never be prevailed upon to do.

A natural, but very remarkable consequence of this manifold activity and lifelong absorption in public affairs was the failure of so great a thinker to produce a single systematic and elaborate work containing a complete and detailed exposition of his philosophical, and especially his ontological views. For such an exposition Leibnitz could find at no period of his life the requisite time and scope. In the vast multitude of his productions there is no complete philosophic work. The most arduous of his literary labors are historical compilations, made in the service of the State. Such were the "History of the House of Brunswick," already mentioned, the "Accessiones Historiæ," the "Scriptores Rerum Brunsvicensium Illustrationi inservientes," and the "Codex Juris Gentium Diplomaticus"; — works involving an incredible amount of labor and research, but adding little to his posthumous fame. His philosophical studies, after entering the Hanoverian service, which he did in his thirtieth year, were pursued, as he tells his correspondent Placcius, by stealth, — that is, at odd moments snatched from official duties and the cares of state. Accordingly, his metaphysical works have all a fragmentary character. Instead of systematic treatises, they

are loose papers, contributions to journals and magazines, or sketches prepared for the use of friends. They are all occasional productions, elicited by some external cause, not prompted by inward necessity. The "Nouveaux Essais," his most considerable work in that department, originated in comments on Locke, and was not published until after his death. The "Monadology" is a series of propositions drawn up for the use of Prince Eugene, and was never intended to be made public. And, probably, the "Théodicée" would never have seen the light except for his cultivated and loved pupil, the Queen of Prussia, for whose instruction it was designed.

It is a curious fact, and a good illustration of the state of letters in Germany at that time, that Leibnitz wrote so little — almost nothing of importance — in his native tongue. In Erdmann's edition of his philosophical works there are only two short essays in German; the rest are all Latin or French. He had it in contemplation at one time to establish a philosophical journal in Berlin, but doubts, in his letter to M. La Croye on the subject, in what language it should be conducted: "Il y a quelque tems que j'ay pensé à un journal de Savans qu'on pourroit publier à Berlin, mais je suis un peu en doute sur la langue..... Mais soit qu'on prit le Latin ou le François,"[13] etc. It seems never to have occurred to him that such a journal might be published in German. That language was then, and for a long time after, regarded by educated Germans very much as the Russian is regarded at the present day, as the language of vulgar life, unsuited to learned or polite intercourse. Frederic the Great, a century later, thought as meanly of its adaptation to literary purposes as did the contemporaries of Leibnitz. When Gellert, at his request, repeated to him one of his fables, he expressed his surprise that anything so clever could be produced in German. It may be said in apology for this neglect of their native tongue, that the German scholars of that age would have had a very inadequate audience, had their communications been confined to that language. Leibnitz craved and

deserved a wider sphere for his thoughts than the use of the German could give him. It ought, however, to be remembered to his credit, that, as language in general was one among the numberless topics he investigated, so the German in particular engaged at one time his special attention. It was made the subject of a disquisition, which suggested to the Berlin Academy, in the next century, the method adopted by that body for the culture and improvement of the national speech. In this writing, as in all his German compositions, he manifested a complete command of the language, and imparted to it a purity and elegance of diction very uncommon in his day. The German of Leibnitz is less antiquated at this moment than the English of his contemporary, Locke.

LEIBNITZ'S PHILOSOPHY.

The interest to us in this extraordinary man — who died at Hanover, 1716, in the midst of his labors and projects — turns mainly on his speculative philosophy. It was only as an incidental pursuit that he occupied himself with metaphysic; yet no philosopher since Aristotle — with whom, though claiming to be more Platonic than Aristotelian, he has much in common — has furnished more luminous hints to the elucidation of metaphysical problems. The problems he attempted were which concern the most inscrutable, but, to the genuine metaphysician, most fascinating of all topics, the nature of substance, matter and spirit, absolute being, — in a word, *Ontology*. This department of metaphysic, the most interesting, and, *agonistically*,[14] the most important branch of that study, has been deliberately, purposely, and, with one or two exceptions, uniformly avoided by the English metaphysicians so-called, with Locke at their head, and equally by their Scottish successors, until the recent "Institutes" of the witty Professor of St. Andrew's. Locke's "Essay concerning the Human Understanding," a century and a half ago, diverted the English mind from

metaphysic proper into what is commonly called Psychology, but ought, of right, to be termed *Noölogy*, or "Philosophy of the Human Mind," as Dugald Stewart entitled his treatise. This is the study which has usually taken the place of metaphysic at Cambridge and other colleges, — the science that professes to show "how ideas enter the mind"; which, considering the rareness of the occurrence with the mass of mankind, we cannot regard as a very practical inquiry. We well remember our disappointment, when, at the usual stage in the college curriculum, we were promised "metaphysics" and were set to grind in Stewart's profitless mill, where so few problems of either practical or theoretical importance are brought to the hopper, and where, in fact, the object is rather to show how the upper mill-stone revolves upon the nether, (reflection upon sensation,) and how the grist is conveyed to the feeder, than to realize actual metaphysical flour.

Locke's reason for repudiating ontology is the alleged impossibility of arriving at truth in that pursuit,— "of finding satisfaction in a quiet and sure possession of truths that most concern us, whilst we let loose our thoughts into the vast ocean of being."[15] Unfortunately, however, as Kant has shown, the results of noölogical inquiry are just as questionable as those of ontology, whilst the topics on which it is employed are of far inferior moment. If, as Locke intimates, we can know nothing of being without first analyzing the understanding, it is equally sure that we can know nothing of the understanding except in union with and in action on being. And excepting his own fundamental position concerning the sensuous origin of our ideas, — to which few, since Kant, will assent, — there is hardly a theorem, in all the writings of this school, of prime and vital significance. The school is tartly, but aptly, characterized by Professor Ferrier: "Would people inquire directly into the laws of thought and of knowledge by merely looking to knowledge or to thought itself, without attending to what is

known or what is thought of? Psychology usually goes to work in this abstract fashion; but such a mode of procedure is hopeless, — as hopeless as the analogous instance by which the wits of old were wont to typify any particularly fruitless undertaking, — namely, the operation of milking a he-goat into a sieve. No milk comes, in the first place, and even that the sieve will not retain! There is a loss of nothing twice over. Like the man milking, the inquirer obtains no milk in the first place; and, in the second place, he loses it, like the man holding the sieve.... Our Scottish philosophy, in particular, has presented a spectacle of this description. Reid obtained no result, owing to the abstract nature of his inquiry, and the nothingness of his system has escaped through all the sieves of his successors."[16]

Leibnitz's metaphysical speculations are scattered through a wide variety of writings, many of which are letters to his contemporaries. These Professor Erdmann has incorporated in his edition of the Philosophical Works. Beside these we may mention, as particularly deserving of notice, the "Meditationes de Cognitione, Veritate et Ideis", the "Systeme Nouveau de la Nature", "De Primæ Philosophiæ Emendatione et de Notione Substantiæ", "Reflexions sur l'Essai de l'Entendement humain", "De Rerum Originatione Radicali", "De ipsa Natura", "Considerations sur la Doctrine d'un Esprit universel", "Nouveaux Essais sur l'Entendement humain", "Considerations sur le Principe de Vie". To these we must add the "Théodicée" (though more theological than metaphysical) and the "Monadologie", the most compact philosophical treatise of modern time. It is worthy of note, that, writing in the desultory, fragmentary, and accidental way he did, he not only wrote with unexampled clearness on matters the most abstruse, but never, that we are aware, in all the variety of his communications, extending over so many years, contradicted himself. No philosopher is more intelligible, none more consequent.

In philosophy, Leibnitz was a *Realist*. We use that term in the modern, not in the scholastic sense. In the scholastic sense, as we have seen, he was not a Realist, but, from childhood up, a Nominalist. But the Realism of the schools has less affinity with the Realism than with the Idealism of the present day.

His opinions must be studied in connection with those of his contemporaries.

Des Cartes, Spinoza, Locke, and Leibnitz, the four most distinguished philosophers of the seventeenth century, represent four widely different and cardinal tendencies in philosophy: Dualism, Idealism, Sensualism, and Realism.

Des Cartes perceived the incompatibility of the two primary qualities of being, thought and extension, as attributes of one and the same (created) substance. He therefore postulated two (created) substances, — one characterized by thought without extension, the other by extension without thought. These two are so alien and so incongruous, that neither can influence the other, or determine the other, or any way relate with the other, except by direct mediation of Deity. (The doctrine of Occasional Causes.) This is Dualism, — that sharp and rigorous antithesis of mind and matter, which Des Cartes, if he did not originate it, was the first to develop into philosophic significance, and which ever since has been the prevailing ontology of the Western world. So deeply has the thought of that master mind inwrought itself into the very consciousness of humanity!

Spinoza saw, that, if God alone can bring mind and matter together and effect a relation between them, it follows that mind and matter, or their attributes, however contrary, do meet in Deity; and if so, what need of three distinct natures? What need of two substances beside God, as subjects of these attributes? Retain the middle term and drop the extremes and you have the Spinozan doctrine of one (uncreated) substance, combining the

attributes of thought and extension. This is Pantheism, or *objective* idealism, as distinguished from the *subjective* idealism of Fichte. Strange, that the stigma of atheism should have been affixed to a system whose very starting-point is Deity and whose great characteristic is the *ignoration* of everything but Deity, insomuch that the pure and devout Novalis pronounced the author a God-drunken man, and Spinozism a surfeit of Deity.[17]

Naturally enough, the charge of atheism comes from the unbelieving Bayle, whose omnivorous mind, like the anaconda, assisted its enormous deglutition with a poisonous saliva of its own, and whose negative temper makes the "Dictionnaire Historique" more *Morgue* than *Valhalla*.

Locke, who combined in a strange union strong religious faith with philosophic unbelief, turned aside, as we have seen, from the questions which had occupied his predecessors; knew little and cared less about substance and accident, matter and spirit; but set himself to investigate the nature of the organ itself by which truth is apprehended. In this investigation he began by emptying the mind of all native elements of knowledge. He repudiated any supposed dowry of original truths or innate or connate ideas, and endeavored to show how, by acting on the report of the senses and personal experience, the understanding arrives at all the ideas of which it is conscious. The mode of procedure in this case is empiricism; the result with Locke was sensualism, — more fully developed by Condillac,[18] in the next century. But the same method may lead, as in the case of Berkeley, to immaterialism, falsely called idealism. Or it may lead, as in the case of Helveticus, to materialism. Locke himself would probably have landed in materialism, had he followed freely the bent of his own thought, without the restraints of a cautious temper, and respect for the common and traditional opinion of his time. The "Essay" discovers an unmistakable leaning in that direction; as where the author supposes, "We

shall never be able to know whether any mere material being thinks or no; it being impossible for us, by the contemplation of our own ideas, without revelation, to discover whether Omnipotency has not given to some systems of matter fitly disposed a power to perceive and think;..... it being, in respect of our notions, not much more remote from our comprehension to conceive that God can, if he pleases, superadd to matter a faculty of thinking, than that he should superadd to it another substance with a faculty of thinking, since we know not wherein thinking consists, nor to what sort of substances the Almighty has been pleased to give that power, which cannot be in any created being but merely by the good pleasure and bounty of the Creator. For I see no contradiction in it, that the first thinking eternal Being should, if he pleased, give to certain systems of created, senseless matter, put together as he thinks fit, some degrees of sense, perception, and thought."[19] With such notions of the nature of thought, as a kind of mechanical contrivance, that can be conferred outright by an arbitrary act of Deity, and attached to one nature as well as another, it is evident that Locke could have had no idea of spirit as conceived by metaphysicians, — or no belief in that idea, if conceived. And with such conceptions of Deity and Divine operations, as consisting in absolute power dissociated from absolute reason, one would not be surprised to find him asserting, that God, if he pleased, might make two and two to be one, instead of four, — that mathematical laws are arbitrary determinations of the Supreme Will, — that a thing is true only as God wills it to be so, — in fine, that there is no such thing as absolute truth. The resort to "Omnipotency" in such matters is more convenient than philosophical; it is a dodging of the question, instead of an attempt to solve it. Divine ordination—"Διδς δ' ἑτελείετο βουλή" — is a maxim which settles all difficulties. But it also precludes all inquiry. Why speculate at all, with this universal solvent at hand?

The “contradiction” which Locke could not see was clearly seen and keenly felt by Leibnitz. The arbitrary will of God, to him, was no solution. He believed in necessary truths independent of the Supreme Will; in other words, he believed that the Supreme Will is but the organ of the Supreme Reason: “Il ne faut point s’imaginer, que les vérités éternelles, étant dépendantes de Dieu, sont arbitragés et dépendent de sa volonté.” He felt, with Des Cartes, the incompatibility of thought with extension, considered as an immanent quality of substance, and he shared with Spinoza the unific propensity which distinguishes the higher order of philosophic minds. Dualism was an offence to him. On the other hand, he differed from Spinoza in his vivid sense of individuality, of personality. The pantheistic idea of a single, sole being, of which all other beings are mere modalities, was also and equally an offence to him. He saw well the illusoriness and unfruitfulness of such a universe as Spinoza dreamed. He saw it to be a vain imagination, a dream-world, “without form and void,” nowhere blossoming into reality. The philosophy of Leibnitz is equally remote from that of Des Cartes on the one hand, and from that of Spinoza on the other. He diverges from the former on the question of substance, which Des Cartes conceived as consisting of two kinds, one active (thinking) and one passive (extended), but which Leibnitz conceives to be all and only active. He explodes Dualism, and resolves the antithesis of matter and spirit by positing extension as a continuous act instead of a passive mode, substance as an active force instead of an inert mass, — matter as substance appearing, communicating, — as the necessary band and relation of spirits among themselves.[20]

He parts company with Spinoza on the question of individuality. Substance is homogeneous; but substances, or beings, are infinite. Spinoza looked upon the universe and saw in it the undivided background on which the objects of human consciousness are painted as momentary pictures.

Leibnitz looked and saw that background, like the background of one of Raphael's Madonnas, instinct with individual life, and swarming with intelligences which look out from every point of space. Leibnitz's universe is composed of Monads, that is, units, individual substances, or entities, having neither extension, parts, nor figure, and, of course, indivisible. These are "the veritable atoms of nature, the elements of things."

The Monad is unformed and imperishable; it has no natural end or beginning. It could begin to be only by creation; it can cease to be only by annihilation. It cannot be affected from without or changed in its interior by any other creature. Still, it must have qualities, without which it would not be an entity. And monads must differ one from another, or there would be no changes in our experience; since all that takes place in compound bodies is derived from the simples which compose them. Moreover, the monad, though uninfluenced from without, is changing continually; the change proceeds from an internal principle. Every monad is subject to a multitude of affections and relations, although without parts. This shifting state, which represents multitude in unity, is nothing else than what we call *Perception*, which must be carefully distinguished from *Apperception*, or consciousness. And the action of the internal principle which causes change in the monad, or a passing from one perception to another, is *Appetition*. The desire does not always attain to the perception to which it tends, but it always effects something, and causes a change of perceptions.

Leibnitz differs from Locke in maintaining that perception is inexplicable and inconceivable on mechanical principles. It is always the act of a simple substance, never of a compound. And "in simple substances there is nothing but perceptions and their changes."[21]

He differs from Locke, furthermore, on the question of the origin of ideas. This question, he says, "is not a preliminary one in philosophy, and one must have made great progress to be able to grapple successfully with

it."— "Meanwhile, I think I may say, that our ideas, even those of sensible objects, *viennent de nôtre propre fond*..... I am by no means for the *tabula rasa* of Aristotle; on the contrary, there is to me something rational (*quelque chose de solide*) in what Plato called *reminiscence*. Nay, more than that, we have not only a reminiscence of all our past thoughts, but we have also a *presentiment* of all our thoughts."[22]

Mr. Lewes, in his "Biographical History of Philosophy," speaks of the essay from which these words are quoted, as written in "a somewhat supercilious tone." We are unable to detect any such feature in it. That trait was wholly foreign from Leibnitz's nature. "Car je suis des plus dociles," he says of himself, in this same essay. He was the most tolerant of philosophers. "Je ne méprise presque rien."— "Nemo est ingenio minus quam ego censorio."— "Mirum dictu: probo pleraque quae lego."— "Non admodum refutationes quaerere aut legere soleo."

To return to the monads. Each monad, according to Leibnitz, is, properly speaking, a soul, inasmuch as each is endowed with perception. But in order to distinguish those which have only perception from those which have also sentiment and memory, he will call the latter *souls*, the former *monads* or *entelechies*.[23]

The naked monad, he says, has perceptions without relief, or "enhanced flavor"; it is in a state of stupor. Death, he thinks, may produce this state for a time in animals. The monads completely fill the world; there is never and nowhere a void, and never complete inanimateness and inertness. The universe is a *plenum* of souls. Wherever we behold an organic whole, (*unum per se*,) there monads are grouped around a central monad to which they are subordinate, and which they are constrained to serve so long as that connection lasts. Masses of inorganic matter are aggregations of monads without a regent, or sentient soul (*unum per accidens*). There can be no monad without matter, that is, without society, and no soul without a body.

Not only the human soul is indestructible and immortal, but also the animal soul. There is no generation out of nothing, and no absolute death. Birth is expansion, development, growth; and death is contraction, envelopment, decrease. The monads which are destined to become human souls have existed from the beginning in organic matter, but only as sentient or animal souls, without reason. They remain in this condition until the generation of the human beings to which they belong, and then develope themselves into rational souls. The different organs and members of the body are also relatively souls which collect around them a number of monads for a specific purpose, and so on *ad infinitum*. Matter is not only infinitely divisible, but infinitely divided. All matter (so called) is living and active. "Every particle of matter may be conceived as a garden of plants, or as a pond full of fishes. But each branch of each plant, each member of each animal, each drop of their humors, is in turn another such garden or pond."[24]

The connection between monads, consequently the connection between soul and body, is not composition, but an organic relation, — in some sort, a spontaneous relation. The soul forms its own body, and moulds it to its purpose. This hypothesis was afterward embraced and developed as a physiological principle by Stahl. As all the atoms in one body are organically related, so all the beings in the universe are organically related to each other and to the All. One creature, or one organ of a creature, being given, there is given with it the world's history from the beginning to the end. *All bodies are strictly fluid; the universe is in flux*.

The principle of continuity answers the same purpose in Leibnitz's system that the single substance does in Spinoza's. It vindicates the essential unity of all being. Yet the two conceptions are immeasurably different, and constitute an immeasurable difference between the two systems, considered in their practical and moral bearings, as well as their ontological aspects. Spinoza[25] starts with the idea of the Infinite, or the All-

One, from which there is no logical deduction of the individual. And in Spinoza's system the individual does not exist except as a modality. But the existence of the individual is one of the primordial truths of the human mind, the foremost fact of consciousness. With this, therefore, Leibnitz begins, and arrives, by logical induction, to the Absolute and Supreme. Spinoza ends where he begins, in pantheism; the moral result of his system, Godward, is fatalism, — manward, indifferentism and negation of moral good and evil. Leibnitz ends in theism; the moral result of his system, Godward, is optimism, — manward, liberty, personal responsibility, moral obligation.

He demonstrates the being of God by the necessity of a sufficient reason to account for the series of things. Each finite thing requires an antecedent or contingent cause. But the supposition of an endless sequence of contingent causes, or finite things, is absurd; the series must have had a beginning, and that beginning cannot have been a contingent cause or finite thing. "The final reason of things must be found in a necessary substance in which the detail of changes exists eminently, (*ne soit qu'éminemment*,) as in its source; and this is what we call God."[26] The idea of God is of such a nature, that the being corresponding to it, if possible, must be actual. We have the idea; it involves no bounds, no negation, consequently no contradiction. It is the idea of a possible, therefore of an actual.

"God is the primitive Unity, or the simple original Substance of which all the creatures, or original monads, are the products, and *are generated, so to speak, by continual fulgurations from moment to moment, bounded by the receptivity of the creature*, of whose existence limitation is an essential condition."[27]

The philosophic theologian and the Christianizing philosopher will rejoice to find in this proposition a point of reconciliation between the extramundane God of pure theism and the cardinal principle of Spinozism,

the immanence of Deity in creation, — a principle as dear to the philosophic mind as that of the extramundane Divinity is to the theologian. The universe of Spinoza is a self-existent unit, divine in itself, but with no Divinity behind it. That of Leibnitz is an endless series of units from a self-existent and divine source. The one is an infinite deep, the other an everlasting flood.

The doctrine of the *Preëstablished Harmony*, so intimately and universally associated with the name of Leibnitz, has found little favor with his critics, or even with his admirers. Feuerbach calls it his weak side, and thinks that Leibnitz's philosophy, else so profound, was here, as in other instances, overshadowed by the popular creed; that he accommodated himself to theology, as a highly cultivated and intelligent man, conscious of his superiority, accommodates himself to a lady in his conversation with her, translating his ideas into her language, and even paraphrasing them. From this view of Leibnitz, as implying insincerity, we utterly dissent.[28]

The author of the "Théodicée" was not more interested in philosophy than he was in theology. His thoughts and his purpose did equal justice to both. The deepest wish of his heart was to reconcile them, not by formal treaty, but in loving and condign union. We do not, however, object to an esoteric and exoteric view of the doctrine in question; and we quite agree with Feuerbach that the phrase *préétablie* does not express a metaphysical determination. It is one thing to say, that God, by an arbitrary decree from everlasting, has so predisposed and predetermined every motion in the world of matter that each volition of a rational agent finds in the constant procession of physical forces a concurrent event by which it is executed, but which would have taken place without his volition, just as the mail-coach takes our letter, if we have one, but goes all the same, when we do not write, — this is the gross, exoteric view, — and a very different thing it is to say, that the monads composing the human system and the universe of

things are so related, adjusted, accommodated to each other, and to the whole, each being a representative of all the rest and a mirror of the universe, that each feels all that passes in the rest, and all conspire in every act,[29] more or less effectively, in the ratio of their nearness to the prime agent. This is Leibnitz's idea of preëstablished harmony, which, perhaps, would be better expressed by the term "necessary consent." "In the ideas of God, each monad has a right to demand that God, in regulating the rest from the commencement of things, shall have regard to it; for since a created monad can have no physical influence on the interior of another, it is only by this means that one can be dependent on another."— "The soul follows its own laws and the body follows its own, and they meet in virtue of the preëstablished harmony which exists between all substances, as representatives of one and the same universe. Souls act according to the laws of final causes by appetitions, etc. Bodies act according to the laws of efficient causes or the laws of motion. And the two kingdoms, that of efficient causes and that of final causes, harmonize with each other."[30]

The Preëstablished Harmony, then, is to be regarded as the philosophic statement of a fact, and not as a theory concerning the cause of the fact. But, like all philosophic and adequate statements, it answers the purpose of a theory, and clears up many difficulties. It is the best solution we know of the old contradiction of free-will and fate, — individual liberty and a necessary world. This antithesis disappears in the light of the Leibnitian philosophy, which resolves freedom and necessity into different points of view and different stages of development. The principle of the Preëstablished Harmony was designed by Leibnitz to meet the difficulty, started by Des Cartes, of explaining the conformity between the perceptions of the mind and the corresponding affections of the body, since mind and matter, in his view, could have no connection with, or influence on each other. The Cartesians explained this correspondence by the theory of

occasional causes, that is, by the intervention of the Deity, who was supposed by his arbitrary will to have decreed a certain perception or sensation in the mind to go with a certain affection of the body, with which, however, it had no real connection. "Car il" (that is, M. Bayle) "est persuadé avec les Cartésiens modernes, que les idées des qualités sensibles que Dieu donne, selon eux, à l'âme, à l'occasion des mouvemens du corps, n'ont rien qui représente ces mouvemens, ou qui leur ressemble; de sorte qu'il étoit purement arbitraire que Dieu nous donnât les idées de la chaleur, du froid, de la lumière et autres que nous expérimentons, ou qu'il nous en donnât de tout-autres à cette même occasion."[31]

If the body was exposed to the flame, there was no more reason, according to this theory, why the soul should be conscious of pain than of pleasure, except that God had so ordained. Such a supposition was shocking to our philosopher, who could tolerate no arbitrariness in God and no gap or discrepancy in nature, and who, therefore, sought to explain, by the nature of the soul itself and its kindred monads, the correspondence for which so violent an hypothesis was embraced by the Cartesians.

We have left ourselves no room to speak as we would of Leibnitz as theosopher. It was in this character that he obtained, in the last century, his widest fame. The work by which he is most commonly known, by which alone he is known to many, is the "Théodicée," — an attempt to vindicate the goodness of God against the cavils of unbelievers. He was one of the first to apply to this end the cardinal principle of the Lutheran Reformation, — the liberty of reason. He was one of the first to treat unbelief, from the side of religion, as an error of judgment, not as rebellion against rightful authority. The latter was and is the Romanist view. The former is the Protestant theory, but was not then, and is not always now, the Protestant practice. Theology then was not concerned to vindicate the reason or the

goodness of God. It gloried in his physical strength by which he would finally crush dissenters from orthodoxy. Leibnitz knew no authority independent of Reason, and no God but the Supreme Reason directing Almighty Good-will. The philosophic conclusion justly deducible from this view of God, let cavillers say what they will, is Optimism. Accordingly, Optimism, or the doctrine of the best possible world, is the theory of the "Théodicée." Our limits will not permit us to analyze the argument of this remarkable work. Bunsen says, "It necessarily failed because it was a not quite honest compound of speculation and divinity."[32]

Few at the present day will pretend to be entirely satisfied with its reasoning, but all who are familiar with it know it to be a treasury of wise and profound thoughts and of noble sentiments and aspirations. Bonnet, the naturalist, called it his "Manual of Christian Philosophy"; and Fontenelle, in his eulogy, speaks enthusiastically of its luminous and sublime views, of its reasonings, in which the mind of the geometer is always apparent, of its perfect fairness toward those whom it controverts, and its rich store of anecdote and illustration. Even Stewart, who was *not* familiar with it, and who, as might be expected, strangely misconceives and misrepresents the author, is compelled to echo the general sentiment. He pronounces it a work in which are combined together in an extraordinary degree "the acuteness of the logician, the imagination of the poet, and the *impenetrable yet sublime darkness* of the metaphysical theologian." The Italics are ours. Our reason for doubting Stewart's familiarity with the "Théodicée," and with Leibnitz in general, is derived in part from these phrases. We do not believe that any sincere student of Leibnitz has found him dark and impenetrable. Be it a merit or a fault, this predicate is inapplicable. Never was metaphysician more explicit and more intelligible. Had he been disposed to mysticize and to shroud himself in "impenetrable darkness," he would have found it difficult to indulge that propensity in French. Thanks to the strict *régime*

and happy limitations of that idiom, the French is not a language in which philosophy can hide itself. It is a tight-fitting coat, which shows the exact form, or want of form, of the thought it clothes, without pad or fold to simulate fulness or to veil defects. It was a Frenchman, we are aware, who discovered that "the use of language is to conceal thought"; but that use, so far as French is concerned, has been hitherto monopolized by diplomacy.

Another reason for questioning Stewart's familiarity with Leibnitz is his misconception of that author, which we choose to impute to ignorance rather than to wilfulness. This misconception is strikingly exemplified in a prominent point of Leibnitian philosophy. Stewart says: "The zeal of Leibnitz in propagating the dogma of Necessity is not easily reconcilable with the hostility which he uniformly displays against the congenial doctrine of Materialism."[33]

Now it happens that "the zeal of Leibnitz" was exerted in precisely the opposite direction. A considerable section of the "Théodicée" (34-75) is occupied with the illustration and defence of the Freedom of the Will. It was a doctrine on which he laid great stress, and which forms an essential part of his system;[34] in proof of which, let one declaration stand for many: "Je suis d'opinion que notre volonté n'est pas seulement exempte de la contrainte, mais encore de la nécessité." How far he succeeded in establishing that doctrine in accordance with the rest of his system is another question. That he believed it and taught it is a fact of which there can be no more doubt with those who have studied his writings, than there is that he wrote the works ascribed to him. But the freedom of will maintained by Leibnitz was not indeterminism. It was not the indifference of the tongue of the balance between equal weights, or that of the ass between equal bundles of hay. Such an equilibrium he declares impossible. "Cet équilibre en tout sens est impossible." Buridan's imaginary case of the ass is a fiction "qui ne sauroit avoir lieu dans l'univers." [35]

The will is always determined by motives, but not necessarily constrained by them. This is his doctrine, emphatically stated and zealously maintained. We doubt if any philosopher, equally profound and equally sincere, will ever find room in his conclusions for a greater measure of moral liberty than the "Théodicée" has conceded to man. "In respect to this matter," says Arthur Schopenhauer, "the great thinkers of all times are agreed and decided, just as surely as the mass of mankind will never see and comprehend the great truth, that the practical operation of liberty is not to be sought in single acts, but in the being and nature of man."[36]

Leibnitz's construction of the idea of a possible liberty consistent with the preëstablished order of the universe is substantially that of Schelling in his celebrated essay on this subject. We must not dwell upon it, but hasten to conclude our imperfect sketch.

The ground-idea of the "Théodicée" is expressed in the phrase, "Best-possible world." Evil is a necessary condition of finite being, but the end of creation is the realization of the greatest possible perfection within the limits of the finite. The existing universe is one of innumerable possible universes, each of which, if actualized, would have had a different measure of good and evil. The present, rather than any other, was made actual, as presenting to Divine Intelligence the smallest measure of evil and the greatest amount of good. This idea is happily embodied in the closing apologue, designed to supplement one of Laurentius Valla, a writer of the fifteenth century. Theodorus, priest of Zeus at Dodona, demands why that god has permitted to Sextus the evil will which was destined to bring so much misery on himself and others. Zeus refers him to his daughter Athene. He goes to Athens, is commanded to lie down in the temple of Pallas, and is there visited with a dream. The vision takes him to the Palace of Destinies, which contains the plans of all possible worlds. He examines one plan after another; in each the same Sextus plays a different part and experiences a

different fate. The plans improve as he advances, till at last he comes upon one whose superior excellence enchants him with delight. After revelling awhile in the contemplation of this perfect world, he is told that this is the actual world in which he lives. But in this the crime of Sextus is a necessary constituent; it could not be what it is as a whole, were it other than it is in its single parts.

Whatever may be thought of Leibnitz's success in demonstrating his favorite doctrine, the theory of Optimism commends itself to piety and reason as that view of human and divine things which most redounds to the glory of God and best expresses the hope of man, — as the noblest and *therefore* the truest theory of Divine rule and human destiny.

We recall at this moment but one English writer of supreme mark who has held and promulged, in its fullest extent, the theory of Optimism. That one is a poet. The "Essay on Man," with one or two exceptions, might almost pass for a paraphrase of the "Théodicée"; and Pope, with characteristic vigor, has concentrated the meaning of that treatise in one word, which is none the less true, in the sense intended, because of its possible perversion,— "Whatever is, is right."

ENDNOTES

[1] The author of a notice of Leibnitz, more clever than profound, in four numbers of the *Gentleman's Magazine* for 1852, distinguishes between capacity and faculty. He gives his subject credit for the former, but denies his claim to the latter of these attributes. As if any manifestation of mind were more deserving of that title than the power of intellectual concentration, to which nothing that came within its focus was insoluble.

[2] A second collection, by the same hand, appeared in 1857, with the title, *Nouvelles Lettres et Opuscules Inédits de Leibnitz*. Précédés d'une Introduction. Par A. Foucher de Careil. Paris. 1857.

“Stimai già che ‘I mio saper misura
Certa fosse e infallibile di quanto
Può far l’alto Fattor della natura.”

Tasso, *Gerus*, xiv. 45.

4

“Augel notturno al sole
E nostra mente a’ rai del primo Vero.”

Ib. 46.

5 “On sait que Voltaire n’aimait pas Leibnitz. J’imagine que c’est le chrétien qu’il détestait en lui.” — Ch. Waddington.

6 “Duo, mihi profuere mirifice, (quae tamen alioqui ambigna,et pluribus noxia esse solent,) primum quod fere essem ἀντοδίδακτος, alterum quod quaererem nova in unaquaque scientia.” — Leibnit. *Opera Philosoph*. Erdmann. p. 162.

7 “Aut enim principium individuationis ponitur *entitas tota*, (1) aut non tota. Non totam aut negatio exprimit, (2) aut aliquid positivum. Positivum aut pars physica est, essentiam terminaus, *existentia*, (3) aut metaphysica, speciem terminans, *haec ceitas*. (4)... Pono igitur: omne individuum sua totaentitate individuatur.” — *De Princ. Indiv*. 3 et 4.

8 Memoirs of Martinus Scriblerus. Chap. VII.

9 A species of binary arithmetic, invented by Leibnitz, in which the only figures employed are 0 and 1. — See Kortholt’s *G.C. Leibnitii Epistolae ad Divarsos*, Letter XVIII.

10 *Historia et Oriffo Calculi Differenttalis*, a G. G. Leibnitio conscripta.

11 *Annales Imperii Occidentis Brunsvicensis.* Leibnitz succeeded in discovering at Modena the lost traces of that connection between the lines of Brunswick and Este which had been surmised, but not proved.

12 “Quam mirifice sim distractus dici non potest. Varia ex archivis eruo, antiquas chartns inspicio, manuscripta inedita conquiro. Ex hic lucem dare conor Brunsvicensi historiæ. Magno numero litteras et accipio et dimitto. Habeo vero tam multa nova in mathematicis, tot cogitationes in philosophicis,

tot alias literarias observationes, quas vellem non perire, ut sæpe inter agenda anceps hæream et prope illud Ovidianum sentiam: *Iniopem me copia facit*."

[13] Kortholt. *Epistolæ ad Diversos*, Vol. I.

[14] That is, as a discipline of the faculties, — the chief benefit to be derived from any kind of metaphysical study.

[15] *Essay*, Book I. Chap. 1, Sect. 7.

[16] *Institutes of Metaphysic*, p. 301.

[17] Let us not be misunderstood. Pantheism is not Theism, and the one substance of Spinoza is very unlike the one God of theology; but neither is the doctrine Atheism in any legitimate sense.

[18] *Essai sur l'Origine du Connaissances humaines*.

[19] Book IV. Chap. 3, Sect. 6.

[20] The following passages may serve as illustrations of these positions: —

"Materia habet de so actum entitativum." — *De Princip. Indiv*. Coroll. I.

"Dicam interim notionem virium seu virtutis, (quam Germani vocant *Kraft*, Galli, *la force*,) cui ego explicandæ peculiarem Dynamices scientiam destinavi, plurimum lucis afferre ad veram notionem substantiae intelligendam." — *De Primae Philosoph. Emendat, et de Notione Substantiæ*.

"Corpus ergo est agens extensum; dici poterit esse substantiam extensam, modo teneatur omnem substantiam *agere, at omne agens substantiam* appellari." "Patebit non tantum mentes, sed etiam substantiæ omnes in loco, non nisi per *operationem* esse." — *De Vera Method. Phil. et Theol*.

"Extensionem concipere ut absolutum ex eo forte oritur quod spatium concipimus per modum substantiæ" — *Ad Des Bosses Ep*. XXIX.

"Car l'étendue ne signifie qu'une répétition ou multiplicité continuée de ce qui est répandu." — *Extrait d'une Lettre*, etc.

"Et l'on peut dire que Pétunduc est en quelque façon à l'espace comme la durée est au tems." — *Exam. des Principes de Malebranche*.

"La nature de la substance consistant à mon avis dans cette tendance réglée de laquelle les phénomènes naissent par ordre." — *Lettre à M. Bayle*.

"Car rien n'a mieux marqué la substance que la puissance d'agir." — *Réponse aux Objections du P. Lami*.

"S'il n'y avait que des esprits, ils seraient sans la liaison nécessaire, sans l'ordre des tems et des lieux." — *Theod*. Sect. 120.

[21] *Monadol*. 17.

[22] *Reflexions sur l'Essai de l'Entendement humain*.

[23] *Entelechy* (ἐντελέχεια) is an Aristotelian term, signifying activity, or more properly perhaps, self action. Leibnitz understands by it something complete in itself (ἔχον τδ ἐντελές). Mr. Butler, in his *History of Ancient Philosophy*, lately reprinted in this country, translates it "act." *Function*, we think would be a better rendering. (See W. Archer Butler's *Lectures*, Last Series, Lect. 2.) Aristotle uses the word as a definition of the soul. "The soul," he says, "is the first entelechy of an active body."

[24] *Monadol.* 67.

[25] See Helferich's *Spinoza, und Leibnitz*, p. 76.

[26] *Monadol*. 38.

[27] Ib. 47.

[28] See, in connection with this point, two admirable essays by Lessing, — the one entitled *Leibnitz on Eternal Punishment*, the other *Objections of Andreas Wissowatius to the Doctrine of the Trinity*. Of the latter the real topic is Leibnitz's *Defensio Trinitatis*. The sharp-sighted Lessing, than whom no one has expressed a greater reverence for Leibnitz, emphatically asserts and vigorously defends the philosopher's orthodoxy.

[29] In this connection, Leibnitz quotes the remarkable saying of Hippocrates, Σύμπνοια. The universe breathes together, conspires. — *Monadal*. 61.

[30] *Monadol*. 78, 79.

[31] *Théodicée*. Partie II. 340.

[32] *Outlines of the Philos. of Univ. Hist*. Vol. I. Chap. 6.

[33] *General View of the Prog. of Metaph. Eth. and Polit. Phil*. Boston: 1822. p. 75.

[34] "Numquam Leibnitio in mentem venisse libertatem velle evertere, in qua defendenda quam maxime fuit occupatus, omnia scripta,precipue autem Theodicæa ejus, clamitant." — Kortholt, Vol. IV. p. 12.

[35] Leibnitz seems to have been of the same mind with Dante: —

"Intra duo cibi distanti e moventi
D' un modo, prima si morria di fame
Che liber' uomo l'un recasse a' denti."

Parad, iv. 1.

[36] *Ueber den Willen in der Natur*. Frankfurt a. M. 1854. p. 22.

Leibniz Rewritten (1899) by Charles Sanders Peirce

From 'La Nouvelle Monadologie'

The nature of things would seem to have a screw loose if the powers of a Renouvier are not to be of service to the race. When we see a man far advanced in the eighties producing, albeit with a collaborator, a great volume of metaphysics, terse, clear, and well-oriented, it is certainly not on his shoulders that we can lay the blame if his industry should teach the world nothing. The principles of Renouvier's philosophy were published in the earlier years of the Second Empire, with the disadvantage of a too modest title. It was mainly other causes, however, that at first prevented the work from being as much studied as it deserved to be. Of late years it has in France been, perhaps, more studied than it deserved to be; but it has not been as *well* studied as it deserved to be. The author belonged to that group of schools in which the ideas of Kant were still paramount. Those schools never fully ripened their fruit, because the attention of the strongest men was turned away to the rich conceptions that the mechanical theory of heat and the Darwinian hypothesis about that time suggested. None of the Kantians had more thoroughly learned their master's great lesson than this Frenchman-the lesson that metaphysics can be solidly founded only upon the science of logic. Unfortunately, Kant, though a logical Samson, had yet treated that science with what we can but call, in view of the importance he attributed to it, inexcusable levity; and his followers had always accepted his logical dicta most uncritically, Just as they have ever since continued to do. The aliment contained in De Morgan's and Boole's studies had not been assimilated by anybody; nor had mathematical reasoning taken on its modern exactitude. What was meant, in that *Quarterly Review* period, by

good logic had for its principal ingredient a forcible and imposing style of writing. Renouvier was, and is, not only an able logician in that sense, after the best French models, but even according to the more scientific standard of mediaeval Paris. But now, fifty years after his acme, if we demand that he shall satisfy the requirements of the exact logic which has since grown up, it is not surprising that we find he falls so far short of it that his conclusions as a whole can no longer be accepted. At many points his well-elaborated thought would be extremely valuable if some modern logician of the first strength would take the trouble to disentangle it from other elements with which it is interlaced. It is lamentable that such a labor is not likely to get performed, since M. Prat has not proved adequate to the task, and yet one does not find where to lay the blame for its non-performance unless it be upon the logic of events and the nature of things.

The present work undertakes the noble task of rewriting the so-called 'Monadologie' of Leibniz, and of more fully developing its philosophy after indispensable corrections. The doctrine is very nearly the same as that of his first philosophical treatise from which he at one time seemed to be wandering. The 'Monadologie' is rewritten in a Kantian spirit; and as time increases the distance from which we survey the Kantian philosophy, its affinities with that of Leibniz appear closer than they formerly did.

We cannot give much idea of what has been packed into these five hundred-odd pages, further than to say that they discuss most of the usual problems of metaphysics and much besides. The main doctrine is that of Leibniz, that the universe is composed of units, indivisible and endowed with consciousness. The doctrine of preëstablished harmony is retained-that the monads do not act on one another in any other sense than that while each one follows out its own destiny in the succession of its modifications of consciousness, these have been arranged so as to harmonize and to amount practically to actions upon one another. But here the authors bid

farewell to Leibniz. The law of sufficient reason is hardly mentioned in the book, but is practically rejected in every aspect of it. Of course, with this law the bottom of optimism falls out. In place of Leibniz' principle of the identity of indiscernibles, that things other than one another must differ in some qualities, Scotus's doctrine of hecceity (substantially that of Kant) is adopted-that individual existence is no general character, but is an irrational act. An important departure from Leibniz is the rejection of all actual infinite multitude (and hence, of all continuity) as self-contradictory. Kantian nominalism is carried to an extreme, every conception of intellectual value (space, time, etc.) being regarded as untrue of substances. Kant himself allows us to surmise that there is some unintelligible root from which each special appearance springs, although all that makes them intelligible is our own embroidery. But in this monadism the nakedness of the thing in itself is laid bare, and it plainly appears that nothing exists but monads and their harmonizing dreams. A single monad, we are told, transcends the limits of possible experience, although some finite collection of them is cognizable.

The position of Renouvier concerning determinism has excited enough curiosity to make it worth defining. Five opinions on this subject are current to-day. The common one, which may be attributed to Boyle, is that nature is a machine working according to exact laws (like the differential equations of dynamics), while the conditions to which those laws apply (like the constants of integration) are entirely arbitrary. Or, this may be expressed by saying that Nature syllogizes in her action; the ultimate major premises being laws, and the ultimate minor premises irrational facts. There are two opinions more deterministic than this. The first is that even the initial conditions of the universe are perfectly regular. This opinion still leaves room for accidents, such, for example, as that a number of bodies should at one instant come into symmetrical positions. The extreme of determinism,

held by Leibniz, supposes that every aspect of every fact is subject to reason, so that there is a special Providence in the fall of a sparrow. There remain two opinions less deterministic than the common one. One of these, which has been called Tychism, is that there are minute departures in nature from any general formula which can be assigned, so that there is a certain element of absolute chance. This is the position maintained by C. S. Peirce a few years ago in the *Monist*. It had already been held by Boutroux, quite incidentally, however, and not as a prominent feature of his argument in favor of the contingency of natural laws. But this is not the opinion of Renouvier. He holds that all causality is exact and produces its component effect, but that, in addition, there are component influences which spring direct from the arbitrary action of the monad. Perhaps Boutroux had in mind something like this when he spoke of "une sorte de jeu laissé aux cadres logiques." These actions, though arbitrary in the sense of not being rational functions of preceding events, are all provided for in the preestablished harmony, and thus duly produce their component effects (or quasi-effects) upon other monads.

Three critical questions are apposite to the new monadism. The first is, Supposing we were to grant all its propositions, how far would it constitute a satisfactory philosophy? What is it that philosophy ultimately hopes to accomplish? It is, if we mistake not, to find that there is some intelligible truth, some absolutely valid reasonableness, to ascertain how far this reasonableness governs the universe, and to learn how we may best do its service. It may be this hope is not destined to be realized, although, being reasonable, it acts to strengthen itself. It may be that reasonableness essentially requires an element of unreason, a brute force, on which and with which to accomplish itself; but in that case we hope that this unreason may turn out capable of becoming infused with reason. There must be nothing hopelessly and finally unreasonable, or in so far philosophy is to no

purpose and its hope is vain. But the new monadism presents many such irrational features. What possible reason can there be for the existence of the precise finite number of monads that there are, rather than for one more? Since the monads do not metaphysically act upon one another, what rational purpose is subserved by the real existence of so many? The mere dream of them by one would do as well. Why should each monad have the three peculiar characters of intelligence, passion, and will, or why should any phenomena be as they are? In short, the absolutely inexplicable pervades the whole system, while one supremely antirational nominalism is supreme over the whole. Continuity is nothing but that modification of generality which is proper to the logic of relatives; and generality is of the essence of rationality. Yet this new monadism makes all continuity a false illusion and all generality equally so. Persuade him that this is true, and what is there for a philosopher but to hug a delusion to his heart as being, by virtue of its reasonableness, infinitely more real than the wretched abortion that the world of reality would so turn out to be? Rather hope that some corrected Hegelianism is the truth, or, better still, that, as the elder James taught, the Reasonable One sets off over against himself an irrational phantom upon which his warmth and light may be brought to pass.

The second question is, how far the reasoning of this work is sound. The opening section sets forth that conception of a simple substance which is the very cornerstone of monadism, without which the whole erection would crumble. Nobody is unaware that most thinkers now reject any such idea. The subject of an attribute, they say, is nothing but a group of phenomena differing from a metaphysical substance in not being permanent, like that old jackknife. Even Kant declared the conception of substance has no validity beyond possible experience. It was incumbent on our authors, then, to begin by proving that there is any substance other than the universe as a whole. Instead of this, they so naively take the matter for granted as to give

a definition of substance which would make it a mere way of thinking. They parade a pretended demonstration that a contradiction is involved in supposing a substance to be infinitely divisible, or, what is precisely the same thing (though they do not so treat it), in supposing an infinite multitude of substances. We will not stop to point out the glaring fallacy of that "demonstration." Modern logic enables us to show that it is absurd to say there is a contradiction in supposing an infinite multitude of substances. There is certainly an infinite multitude of finite whole numbers. True, these are only possibilities, not substances. But according to the principle of hecceity, admitted by the authors, mere substantial existence is no general character and cannot create a contradiction. In other words, what is possibly possible is possibly actual.

How far can this work be regarded as the natural perfecting of the philosophy of Leibniz? Leibniz had more sides than one. If we consider him as above all else an extreme nominalist, and expunge from his celebrated paper all that tends in the opposite direction, the development of what would remain might not be very different from the *nouvelle monadologie* minus its free-will doctrine. But if we deem a man to be best represented by that one of his ideas which shows most prepotency, it is in the direction of the differential calculus that we must look for the genuine Leibniz, and in philosophy we must regard the law of continuity as most Leibnizian. This principle would at once do away with the isolated monads, and render the extravagant and unverifiable hypothesis of preëstablished harmony superfluous by directly solving the riddle of the transitivity of causation, while it would form the basis of a philosophy in deepest unison with the ideas of the last half of the nineteenth century.

Leibniz as a Politician (1911) by Adolphus William Ward

THE ADAMSON LECTURE, 1910

In an early chapter of the book which must be regarded as the chief literary monument of the late Professor Adamson's great intellectual powers in one of those *Lectures on the Development of Modern Philosophy* in which every sentence seems to fall weightily from unfaltering lips and the superfluous is shunned with uncompromising directness — there is a brief explanation of the fact that the central idea of Leibniz' philosophy was never systematically worked out by him. " No doubt," says Adamson, "the main reason for this is to be found in the enormous varied activity of a public kind which fills the life of Leibniz from 1676 on to his death" [in 1716]. " In all the great movements of religion and politics he shared largely; expended infinite time and energy on the perfectly hopeless task of striving to reunite the Protestant and Catholic Churches, laboured with greater success to bring about, by the foundation of academies of science in the capitals of Europe, a kind of community of learned men; and was the first to project what is even yet incomplete — a detailed and comprehensive history of the fortunes of various European states. His public work, indeed, would have amply occupied the energies of a more ordinary man. It is not surprising, therefore, that the philosophical writings of these later years are fragmentary, that the most important points are often advanced in occasional correspondence, and that the most condensed statement of his views requires for its elucidation reference to a variety of incomplete sketches and plans of undeveloped works never carried into execution."

When, by the indulgent choice of old colleagues and friends, I was invited to deliver a lecture in connexion with a foundation established to perpetuate Professor Adamson s memory in a University in the building up of which he had a large share, I hardly knew whether I should be doing honour to that memory by accepting the invitation. But, searching, as I may confess to you, for excuses which might, at all events in my own eyes, palliate my presumptuousness in following a natural impulse, I remembered that in a course of public lectures which we had organised in this College not long before Professor Adamson transferred his services to one of the chosen seminaries of philosophical study north of the Tweed, his friendly disregard of my unfitness for the match actually went so far as to allow me to associate myself with him in a continued series of discourses, of which, I need hardly say, all the honours remained with him. Thus it occurred to me that you might be willing, on the present occasion also, to regard what I have to offer you as a sort of supplement or excursus to a passage in one of his own admirable lectures. For the rest, I have long thought that, while on the one hand no great man and no great life can be thoroughly understood unless they are viewed under all their main aspects, so nothing can be more futile, when seeking to form or formulate a judgment of a great individual force in history or in life, than the resolute exclusion even of a subsidiary aspect, because its significance is only secondary. And to no man does this apply more fully than to Leibniz, whose intellectual activity, more varied than that of any but a very few moderns, was singularly consistent with itself and with the desire for harmony which so largely shaped his thought and swayed his philosophy. I say moderns, for to what ancient sage would not the very notion of an intellectual activity labelled in different directions like a sign-post have seemed preposterous?

And yet, were I to attempt in the course of our brief hour to present even the merest outline of what Professor Adamson, using the word in its

narrower sense, describes as the public work of Leibniz, no epitome could ever have fallen further short of the relative usefulness of a summary. I should in no case have wished to say anything as to his scientific and historical work proper in the former case because of my utter incompetence to form an estimate of it, in the latter because its value lies in qualities which, while they are in perfect accordance with the spirit of Leibniz s intellectual labours at large, hardly lend themselves to illustration or exposition on an occasion like the present. I shall return to the *Annales Brunsvicenses* from a different point of view before I close. Here, it will suffice to observe that, to quote from the late Ernst Curtius s brilliant oration on the Leibniz Day of the Berlin Academy in 1873, " though no theoretical connexion exists between those *Annals* and the doctrine of monads, yet Leibniz in his historical labours once more proved himself the great organiser of intellectual work, rightly perceiving what was really necessary for the foundation of a science of history, viz. the collection of documents and the investigation of sources, and thus setting a splendid example of painstaking and self-denying labour on the material at his disposal."

For, apart from these, there was hardly a field of human knowledge bearing on government and society with which he was unfamiliar and the cultivation of which he failed to advance; so that the very limitation which I have sought to impose upon myself by treating of Leibniz as a politician only does not, as a matter of fact, exclude all that I am forced to omit. Leibniz for instance, was a trained student of Law both civil and canonical, and, like all great jurists for I do not know what exception could be cited to the generalisation — he was, at all events in principle, an advocate of legal reform. The penal system which he found in existence in his own country was a special object of his critical study, and of the procedure in vogue against witches and witchcraft one of the lingering blemishes on the face of

Western civilisation — he was a resolute opponent. He was, again, a political economist in days when the very basis for the application of economic principles was almost everywhere wanting. He was interested in the progress of industry and trade, predicting, almost a century before it became a great historical fact, the enormous value of the use of machinery in what continued, by a long-lived misnomer, to be called manufacturing industry; but he was not less solicitous for the maintenance and development of agriculture, and is found upbraiding the Whigs of his day for depressing its interests in favour of commerce, the supposed backbone of their political party. He was remarkably alive to questions of finance and taxation; he carefully watched the beginnings of a system of insurances, and was intent upon measures for improving the sanitary condition of the people, and protecting it against the spread of infectious diseases, even where their cure was an unsolved problem. In reading some of the political pamphlets on which I am about to touch and which turn on the successful conduct of wars, I have been repeatedly struck with the attention he gives to the health of armies and to the sufficiency of the commissariat on which it so largely depends as important elements in their effectiveness. I need hardly say that education was a theme very near to his heart, and that in two directions in particular his farsightedness asserted itself in this field in an extraordinary degree. On the one hand, he perceived the place which, to translate his speculations into the language of the present day, science would come to occupy by the side of the other studies. Humanism, he was convinced, had no prescriptive right to rule the progress of human culture any more than the scholasticism which it had superseded. And we humanists of a later age, who have learnt to ignore the old bugbear at which during the better part of our lives, north or south, we have been constantly told to tremble the fear of the classics being driven to the wall may accept quite cheerfully the sort of apologue which I find in a passage of a letter

from Leibniz to Thomas Burnet: “I do not for a moment envy the excellent Mr. Dryden” — it seems to bring two epochs of Western intellectual life rather closely together to find Leibniz writing about Dryden as a contemporary— “because his Virgil has put more than £1,000 into his pocket. But I wish that Mr. Halley could secure the same sum at least four times over so as to be able to travel round the world and discover for us the secret of the variation of the compass, and I wish that Mr. Newton could obtain it tenfold and a good deal over, in order to be able to continue his profound meditations without interruption.” You see how Leibniz thought of the endowment of research; and, if his indefatigable exertions at Vienna, at Berlin, and elsewhere in favour of those Academies and Societies whose true purpose is the promotion *viribus unitis* of great researches in the whole boundless realm of human knowledge be taken into account, I should be at a loss to say what other individual has ever equalled him in advancing the highest of all forms of educational work. One cannot but speculate on the satisfaction with which he would have regarded such conceptions on the value of organised University research as have lately been brought to the eve of practical realisation at Berlin, on the occasion of the centenary of its great University — an institution which he may almost be said to have foreseen.

On the other hand, he showed himself fully aware of the signficance of literary expression as one of the chief agencies by which national self-knowledge and national self-reliance are trained and matured. He perceived that the vernacular (what an unfortunate term! let me say, the mother-tongue) is the instrument with which Providence has supplied a nation resolved on having and holding these possessions; and, a few years before the foundation-deed of the Berlin Academy declared the preservation and the study of the German language to be one of its chief tasks, Leibniz had promulgated the principles then first officially approved. And, if the style of

his numerous German compositions in prose and in verse still offers an unmistakable and at times uncomfortable contrast to the care and elegance of his Latin and his French, he never shrank from using his native tongue unless occasion demanded more cosmopolitan speech. So far as I know, his communications to the Emperor were all in German; nor had he for gotten Luther s principle of plain speech for plain folk.

You may think that I am losing my way before I have reached the threshold which I have invited you to cross with me, and I will therefore say nothing of Leibniz s labours for the communication of the results of research as well as for its prosecution, nor ask you to consider his claims to the title of the originator of the modern encyclopaedia. But there is a different instance of his constructive efforts as a man of action which I cannot pass by not only because it completely harmonises with his endeavours as a politician, but because at times it intimately associates itself with, and almost forms part of them. For there can be no doubt whatever that the religious question continued to be a vital element in European politics, and in those of the Empire in particular, long after the conflicts which culminated in the Thirty Years War had nominally come to an end.

The efforts, then, of Leibniz for Religious Reunion, *i.e.* for a formal closing of the great schism of the West by means of a reconciliation between Rome and the Protestant Churches, were among those of his labours which were doomed to disappointment whether, like certain others on which we shall have to touch, to absolute failure, is more than those of us can pronounce who lack the gift of prophecy. How unwearying those labours were in the present instance is known to us not only from the arguments carried on by him alike with the protagonists in a discussion which lasted over the better part of a human generation, from the Eagle of Meaux downwards, and with the parliament of lesser participants — ecclesiastics and doctors and more or less enthusiastic women. We also

know it from at least two long correspondences of which one is familiar to all who are interested in the life and labours of Leibniz, while of both this subject of Religious Reunion forms a constant theme. The letters exchanged between Leibniz and the Duchess, afterwards Electress, Sophia of Hanover are, as you know, of great biographical interest, so far as the life and opinions of an illustrious lady fit ancestress of a long line of English sovereigns are concerned. Gifted with extraordinary acuteness of perception and a lively interest in things intellectual, at the same time perfectly self-possessed and when needful self-restrained in the difficulties of life and hers seemed almost endless in maidenhood, marriage, and old age she, unlike her *quondam quasi* suitor, afterwards King Charles II, seems while saying many witty things, never to have done an unwise one. What is of more importance, her opinions, so far as we can judge from a series of personal records quite exceptionally full and varied, were rarely on any side but that of good sense and right feeling. At the same time, as Leibniz very well knew, even matters in which she felt an interest had to be presented to her in lucid and attractive form; she was a princess first, after all, and not a philosopher, like her aunt the Princess Palatine Elizabeth, with whom Descartes had corresponded on scientific topics as with an equal; nor did she profess to care for what was lengthy or intricate, or involved an unreasonable amount of application in the mastering of it. Religious questions she approached, like all other questions, with a sincere love of truth, but with a want of interest in theological issues and formulae partly due to the natural constitution of her mind, partly (one cannot but conjecture) to the experiences of her life, which had been so full of these contentions and of their untoward effects upon the problem of getting on in the world as to breed in her a good deal of indifference towards them.

The other correspondent to whom Leibniz had as it were to render a continuous account of the progress of his endeavours in the Reunion

question was a spirit of another sort. Landgrave Ernest of Hesse-Rheinfels was one of the younger sons of Landgrave Maurice of HesseCassel, the political associate of the French King Henry IV and of Geneva, whose edifice of a Protestant polity, constructed with infinite trouble, had been ruthlessly swept away early in the Thirty Years War, and whose dynasty was only by the most careful steering brought safe out of the waves of that ruinous conflict. After its close Landgrave Ernest, although he had gallantly come forward to offer the services of his sword to the Emperor against the Turks, soon gave himself up to his endeavours to keep up a petty principality of his own on the Rhine, and to have his own way in it. He had become a convert to the Church of Rome, and being anxious to induce others to follow his example, carried on his propaganda by all the means in his power, publishing a treatise called *The Discreet Catholic*, and, with less discretion than might have been expected from its author, establishing at Rheinfels a sort of college for ladies of whom several were converts like himself, and for whom, in spite of his sceptical kinsfolk, he cherished a platonic interest. He made no secret to Leibniz of his wish that, as they shared in many common interests, so they might be united in the same church; but, since this could not be, he was content to discuss projects of Reunion, though he thought that Pietists and Chiliasts and other visionaries, as he called them (including no less a name than that of Spener in his denunciation), must be looked upon as obstacles in the path.

The toleration which is, in some measure at least, the product of indifference, and the intolerance which springs from impatience of all private judgment but one's own — neither of these was an ally on whom Leibniz could greatly depend in his long-sustained effort to assert as the basis of reunion the existing inner unity of the Christian Church at large. For this, the *in essentialibus unitas* of St. Augustine, was the principle which he continued to press in both the chief phases of the movement in

which he bore a part. The more hopeful of these, which extended over the last quarter of the 17th century, with the exception of the last five years, is reflected in the correspondence (included in that between the Duchess Sophia and Leibniz), of which the central figure is Royas de Spinola, Bishop of Tina in Croatia, and afterwards of Wiener-Neustadt. This prelate had the full authority of the Emperor Leopold in carrying on his endeavours, as well as the tacit approval of Pope Innocent XI. Leibniz, who had not taken the initiative in the Bishop s scheme, warmly approved of his method, which was neither that of discussion nor that of concession. The inefficiency of the former is sufficiently taught by history, and some of us may remember one of the essays of Clarendon (certainly no reunionist) in which he blandly asserts the uselessness of religious conferences between Roman Catholics and Reformed, inasmuch as they never converted a single human being: those who are converted are not converted by argument. In concession (*condescendance*) on the other hand, there is always something that cannot be conceded; Leibniz himself had told the Landgrave that he would join the Church of Rome if he did not feel that certain tenets which he must reserve would, “ peut-être,” not be conceded, and he could not risk the peut-être. What then was Bishop Spinola’s method? To induce the Church of Rome to regard as not absolutely alienated from the Church those who, while *material, i.e.* nominal, heretics, were ready to submit to a Council of the Church recognised by them as such, and to induce the Protestants for their part to declare that readiness. You will perceive at once how this method carries us back to days when resort to it was still formally possible. Was it possible to revive the conditions of the times of Charles V in the age of Leopold I and Louis XIV? Of course the application of the method involved a large amount of tentative discussion as to the questions of major and of minor moment which would have to be reserved or waived, were such a basis of negotiation to be regarded as within the sphere of

practical politics; and on this head it is impossible to observe without interest some of us might add without sympathy which among the controversies of lesser moment Leibniz regards as mere matters of phrase and formula; while as to others he shows how not even all Catholics and all Protestants are agreed among themselves, and yet others seem to him to possess intrinsic importance, but not such as to outweigh the blessings of Christian reunion.

Louis XIV, at least, did not choose to fall behind Leopold I by rejecting as impossible a contingency against which, by his approval of the Bishop of Tina's initial proceedings, the Emperor had shown himself unwilling to shut the door. When, therefore, the Duchess Sophia put herself in communication on the subject with her sister, that queer saint the Abbess of Maubuisson near Paris, it was with the knowledge of the King of France that other persons were drawn into the correspondence, and that an exchange of letters ensued between Leibniz and Bossuet which, after being carried on for about four years, was dropped and again taken up for a short time in 1699, partly with the aid of the enthusiasm of Mme. de Brinon.

The earlier part of this correspondence was really little more than a continuous account rendered by Leibniz to Bossuet of the proceedings of Spinola, supplemented by arguments of his own; when, after Spinola's death, it was taken up once more, Leibniz explained in a letter to the Elector, George Lewis (afterwards King George I), why this last opportunity should in his judgment not be rejected. His hopes were small, but it was well to do so much for Christian charity, and if possible to induce the Church of Rome or some representative Roman theologians, to agree to a basis on which posterity might construct the most acceptable scheme of reunion that could be agreed upon, and which would anticipate future attempts at reunions in which everything would be sacrificed. The hope, as we know, was futile; the political horizon, which had in a measure cleared

with the Peace of Ryswick, was soon blacker than ever; a clause of that peace itself had seriously alarmed German Protestants; and at home and at the last period of the religious policy of Louis XIV was that of the undisputed ascendancy of the principles of Madame de Maintenon.

It would, I fear, take me too far on the present occasion, were I to seek to illustrate with any degree of detail the connexion between the religious and the political conceptions of Leibniz; and it is to his work as a politician proper that I now turn. It may be said to cover the whole of his life from the time when, after being refused the doctorate of law by the University of his own native Leipzig on account of his youth (he was then twenty years of age), he had been promoted to this degree at Altdorf, but, declining the professorship offered him there, had entered the service of the Elector of Mainz. From this time forth he became a courtier and a placeman, but without ever surrendering his independence of judgment or doing violence to his sense of self-respect. He was only too well aware of the prejudice existing in the official world against taking the advice of scholars and bookmen; when in later days he seemed on the point of permanently entering into the Imperial service at Vienna, he was anxious to do so in the recognised position of a councillor of state as well as that of a librarian. The difference between the position of an official and that of an unofficial adviser was to be brought home to him with painful distinctness, when, after the death of the Electress Sophia, the ‘Master’ (as with her usual humorous twinkle she was in the habit of calling her eldest son, whose qualities certainly included that of knowing his own mind) speedily adjusted the relations between himself and Leibniz to those between employer and employed. But, though Leibniz was a courtier and very well understood the necessity for a deferential attitude and the *nuances* of expression in writing as well as in speaking which that attitude implies, no great publicist, from Burke to Gentz to the leaders of modern journalism in

the days of Louis-Philippe and Queen Victoria, has ever been more desirous of placing himself in touch with a popular, and, if possible, a numerous audience. Accordingly, the political writings of Leibniz are sometimes confidential memoranda, addressed to sovereigns and ministers, sometimes pamphlets in the latter case almost always anonymous or pseudonymous, launched upon the sea of unbounded publicity. In yet other instances, they are something between the two species, resembling those *ballons d'essai* of which later examples have been started in the sphere of higher journalism — sometimes suggesting to those in authority ideas to the conception of which they may not have chanced or not have ventured to rise, sometimes, again, inspired by those in authority with a view to ascertain how far public opinion will follow. This relation between authority and public opinion was not so well organised at the end of the seventeenth and beginning of the eighteenth century as it may have been in our days; but statesmen have never been able to operate quite without the support of public opinion — and public opinion, in its turn, usually needs a little assistance in the process of forming itself. Leibniz himself compares one of his more popular tracts a scheme for a descent on Biscay after the battle of La Hogue — to one of the letters which at Venice members of the pensive public were invited to place in the lion s mouth in the palace of St. Mark, to be used or ignored in the counsels of the Signoria.

It would serve no purpose in this brief address to seek to discriminate between the varieties among his contributions to political literature, of which I can only mention a few specimens. For my primary object is to indicate the way in which the great optimist, the thinker who was convinced that in the end all things would work together to the fulfilment of the Divine plan, regarded some of the chief political problems of his age and was anxious to see them treated by those upon whose action or inaction it depended in what sense they would be solved.

Leibniz was only in his twenty-third year when, in 1667, he was introduced into the service of the Elector of Mainz (John Philip von Schönborn) by the Elector s former minister, Johann Christian von Boineburg. Both these men were very remarkable personalities and must be reckoned not only among the ablest German politicians of their day but as belonging to the select band of statesmen who were true patriots at heart. Yet the name of the Elector is associated in history with the first Confederation of the Rhine — a transaction which, when all has been said that can be urged as to its ultimate purposes, nevertheless redounded to the advantage of France and to the increase of her influence in Germany. Boineburg, after, as minister of the Elector, openly declaring himself an adversary of that influence, had through French intrigue, facilitated perhaps by some indiscretion on his own part, been actually put under arrest by his master; and, though, on his clearing himself from the charges against him, John Philip had entreated him to resume his former post, he had preferred to remain out of office, while in full possession of the electoral favour and confidence. The political ideas of the pair were really in harmony and centred in the desire, while strengthening the Empire internally, to maintain in European affairs a balance between France and Austria, and to preserve the peace which was indispensable for Germany. The material ruin in which the Thirty Years War had involved the land (for I think we may confidently reject the doubts which have been recently thrown on this commonly received view of the case) still stared every patriot in the face, and was only here and there at last giving way to better things. ‘Germany,’ so Leibniz wrote many years after John Philip s death, was scarcely beginning to breathe again, and peopled almost entirely by a generation under age if war broke out afresh, there was reason to fear that this generation would be destroyed before it had reached maturity, and that a great part of the unhappy land would be all but turned into a desert.” These were the

impressions under which a policy of peace seemed indispensable to the patriotic Elector of Mainz, who, as Leibniz says, could not conceive that the predominance of France would assert itself with the extraordinary rapidity which its progress was actually to display; these were the conditions with which, as well as with the stagnant sluggishness prevailing in many parts of the Empire and with the mistrust of the House of Austria which war and peace had alike bequeathed to many of its Princes and their subjects, those politicians and political thinkers had to contend who, like Leibniz, gradually came to recognise that the Western was not less imminent than the Eastern peril.

Leibniz' earliest political tract was written for the use of Boineburg, when, after his restoration to the Elector s favour, that statesman in 1668 attended the Polish election diet as ambassador for the German candidate (Count Palatine Philip William of Neuburg). Neither he nor either of the candidates really favoured by France and Austria respectively was chosen; and thus, after a fashion, the desired balance may be said to have been observed. What interests us in the tract is Leibniz deprecation of yet another possibility (which likewise remained unrealised), viz. the choice of the Russian candidate. Russia, writes the far-sighted young politician, who in his later years was to be greatly attracted by the civilising policy and the high personal intelligence of Peter the Great, would by the virtual appropriation of Poland become a dangerous colossus, and the Turk would be duplicated. But these were relatively remote speculations.

In his second pamphlet, and one which its comprehensiveness of view already entitles to be numbered among the notable political deliverances of its author, his thoughts are already directly turned to the West. The Confederation of the Rhine had fallen to pieces, and the eyes of the Elector of Mainz, with Boineburg once more in his secrets, had been opened by the War of Devolution to the aggressive policy of Louis XIV. But the Elector

and those who thought with him were not yet willing to hurry Germany into a decision which might be fatal to her prosperity, unprepared as she was for a struggle; and the choice therefore had lain for some little time between risking all by joining the celebrated — perhaps unduly celebrated — Triple Alliance which had in a measure stayed the advance of the French arms, or playing a waiting game, and meanwhile organising resistance at home. *Securitas Publica* (the way of establishing the security of the German Empire) as the title of the treatise is usually cited in brief — was written in 1670–1 — between two wars; and its immediate occasion was to provide a basis of discussion at an interview between the Electors of Mainz and Trier at Schwalbach, where they were to decide on the policy to be adopted by them and the Duke of Lorraine, with whom they had combined in the so-called alliance of Limburg, and who was now trembling how to save his duchy from the embraces of France. While Leibniz was in the middle of his disquisition, Marshal Crequi had overrun Lorraine and strengthened the writer s argument. In a very interesting survey of the chief states of Europe and of their relations to France, he demonstrates how the conclusion is inevitable that Louis XIV has a design upon the United Provinces; but that to join the Triple Alliance and enter upon immediate war would be perdition for Germany and more especially for the defenceless states of the South West. Better form an alliance between these German States of the West, which could for the present give no offence to France; but without including her as a predominant partner, as in the case of the Confederation of the Rhine, and thus gradually prepare for the conflict which must come sooner or later, but the later the better.

Both the negative and the positive part of the advice was followed; the Triple Alliance was left to put an end to itself Leibniz did not know that Charles II’s Secret Treaty of Dover (1670) with Louis XIV had already destroyed this diplomatic masterpiece; and an alliance of German States

was formed at Marienburg, which with excellent intentions proved a dead letter. The invasion of the United Provinces by France, with England on her side, became more imminent than ever, and a European war, in which (as events proved) the Emperor could not remain neutral even if he would, must almost inevitably follow. Was Germany, like Holland, to fall helpless into the victor's hands? Or might the blow, if it could not be met, be diverted?

This calculation, rather than a dream of bringing the kingdom of the Pharaohs within the range of the Western civilisation which owed an ancient debt to that mysterious land, was, it cannot be doubted, the real *raison d'être* of Leibniz' famous 'Egyptian plan.' Far from being a mere scholar's fancy, this design had in germ long impregnated the political atmosphere of the West, allying itself with the lingering enthusiasms of the Crusades, and with the desire for a condign *revanche* which the failure of St. Louis had every now and then called forth in the sons of France. Bacon, whose influence upon Leibniz was probably far greater in the matter of political and social projects than it was in philosophy, had, in the dedication to his *Holy Warre* suggested that the princes of Christendom should unite against the Turk instead of inflicting damage upon one another. This was shortly after the beginning of the Thirty Years War; thirteen years after its close, Cardinal Mazarin, doubtless not actuated altogether by religious motives, left a legacy for carrying on a war against the Ottoman power; and, after the accession of Louis XIV, Boileau and Fenelon in letters, and others in apocalyptic prophecies, appealed in the same sense to the receptive mind of the King. In 1664, French troops, forming a contingent furnished by Louis XIV as a member of the Confederation of the Rhine, took part in Montecuculi's splendid victory at St. Gotthard on the Raab over the Grand Vizier Ahmed Köprili, and in the same year the French flag was planted at

Gigeri on the Algiers coast, as a place of security against the Moslem pirates, the pest of the Mediterranean.

It is unnecessary further to illustrate the growth of an idea which took hold of Leibniz at a very early date, and which no doubt was met half-way by the fascination which the rediscovered East, whether Near or Far, always exercised over his imagination. To go no further back, towards the close of the treaties mentioned, the *Securitas Publica*, he had dwelt on the probability that in the future, when the scope of all expeditions of war would be remote, France, too, would find her sphere of action at a distance, and, as she had done in the days of St. Louis, would carry the arms of Christendom into the Levant and into Egypt in particular. In 1671 — only a few months before Louis XIV definitely announced to the Elector of Mainz his intention of invading the United Provinces — Leibniz composed his *Fabula Ludovisia*, in which St. Louis is supposed to appear in a dream to his reigning namesake, and to bid him undertake an expedition to Egypt; which rather sudden proposal Louis XIV, on awaking, dutifully promises to carry out. (There is no reason for wondering at the employment by Leibniz of this or similar devices for arresting attention on so serious a subject; he made constant use of them, from dialogue and poem to epigrammatic couplet and even mild anagram; for like all born publicists may I say all born teachers — he held by the principle of repeating many times, if possible in many different ways, the one thing that it is desired to impress on readers or hearers.) When, in the same year, Duke John Frederick of Hanover, Leibniz s subsequent patron, who was *persona gratissima* with the French King and Court, visited Mainz, Leibniz hoped for a personal introduction through him to the great monarch, and it was afterwards intended that the same thing should be effected by the Elector of Mainz, to whom Leibniz s scheme had by that time been communicated by Boineburg. In the end, however, it was agreed to send a general statement of

the nature of the scheme to Paris beforehand, reserving its details for the present. In February 1672, Boineburg was informed by Pomponne, then French minister for Foreign -Affairs, that the King wished for further explanations from the author of the preliminary memorandum. Thereupon, Leibniz (taking occasion, according to his wont, to combine various scientific projects with his great political design) at once started for Paris, where he arrived in March 1672. In the same month, France and England declared war against the Dutch, and in two months time a great part of the United Provinces had been overrun by the French forces, with King Louis XIV at their head. From the camp at Doesburg Pomponne sent a rather *nonchalant* message that Holy Wars had gone out of fashion; and it might have been supposed that Leibniz at Paris would have hereupon been satisfied to concentrate his attention upon subjects of common interest between himself and Antoine Arnauld, the inventor of the pendulum, and Christian Huygens, the discoverer of Saturn's ring.

Not so; for, though the Dutch War had not been averted, it seemed by no means certain that its worst apprehended consequences could not still be avoided. It had long been known that there was a great deal of diplomatic tension between the French Government and the Sublime Porte; and, in June, 1672, an open rupture occurred between the two Governments at Adrianople, and people in France began to talk about a Turkish War the very issue involved in Leibniz s design. It therefore seemed after all well worth his while that, while he was waiting at Paris with more or less hopefulness for the return of the King from his Dutch campaign, he should compose a full statement of his design for the use of the great monarch. The statement drawn up by him was afterwards known as *De expeditione Aegyptiaca regi Francicz proponenda Justa Dissertatio*; while a shorter form of the same — a first draft, or more probably a summary — which he

intended for Boineburg, was preserved under the title of *Consilium Aegyptiacum*.

My account of the contents of these documents must necessarily be quite brief, and pretermit preamble, illustrations and peroration. In a word, then, the Egyptian scheme is here represented as the greatest and the most important undertaking upon which France could possibly enter; for its accomplishment implies the acquisition by her of the arbitrium of the known world and the military leadership of Christendom. It is at the same time the easiest and the least dangerous of great designs open to France, and its failure would not be fatal to her. Moreover, no time could be so favour able for carrying it out as the present. The conquest of Egypt by France would be the conquest of the Holland of the East, and would at the same time bring about the overthrow of the actual Holland, whose strength lies in her colonies and in the trade of the East Indies. The master of Egypt can render either infinite service or infinite disservice to the world — the former by stopping trade as the Turks have done, the latter by developing it through the union of Mediterranean and Red Sea by means of a canal.

All this comes home; and it is almost by way of a parenthesis only (though we know how much is some times hidden in parentheses) that it is pointed out how, in comparison with such gains as these, the conquest of a few towns on the Rhine or in the Low Countries is worth very little, while, moreover, the kindling of a great European war would be insensate on the part of a power which would thus raise resistance against itself on all sides. Contrariwise, what could stand in the way of the two great imperial Houses if they were agreed on dividing the world between them France taking the Eastern half of the whole?

If this part of the argument may not seem wholly free from objections, it must be allowed that the portion of the treatise which deals with the way in which the project could be easily carried out, with the forces that would be

necessary for the purpose, with the methods of providing for them and for the occupation of the country, and with the existing condition of the Turkish empire as encouraging the enterprise — is to all appearance unanswerable, and full not only of sound practical sense but of a knowledge of detail which might have commended itself to the best informed of the King s advisers. Departmental knowledge on the part of these advisers was not the least among the causes of the greatness of Louis and his monarchy; and a very strong point in Leibniz as a politician was that he never spoke without his book. Even the facilities for retreat, should the expedition unexpectedly prove unsuccessful, are carefully outlined; and, in short, the whole project is so satisfactorily expounded that the author is war ranted in dealing quite succinctly with the question of the justice of the enterprise he proposes — a holy war, conducing to the benefit of humanity, and to the advance of the Christian faith, the liberation of sufferers, and offering an opportunity of revenge for the wrongs inflicted upon France.

The memorandum never reached Louis XIV; for he never asked to see it. In June 1673, his government arrived at an understanding with the Porte, and his interest contingent as it was — in the design came to an end. But it was not forgotten by Leibniz, though he now speedily passed from France into England, and there seemed absorbed in the differential calculus and Newton. Several allusion to its central thought are to be found in his later writings, more especially in the half-ironical *The Great King's Main Design* of 1687 or 8, when, on the eve of the most shameless of all Louis XIV s wars of aggression — the Orleans War — he asks why, if so jealous of the Austrian successes against the Turks, the King of France did not take part in the attack upon their dominions, more especially upon Egypt, since all of these lay at his mercy.

The two versions of Leibniz' Egyptian plan were not, however, destined to remain buried among his papers at Hanover, though both of them reposed

there unnoticed for something like a century and a quarter. I cannot pass on without reminding you of the circumstances in which the Design first became known to the world, and thus gained a notoriety which in the Europe of the Napoleonic Age was inconceivable except in some sort of connexion with Napoleon himself. Before, in 1798, Napoleon set forth on that Egyptian expedition which — was primarily intended as a blow against Great Britain with what ulterior conceptions or visions I will not here pause to enquire; but in India, too, England owed France a *revanche* — he could not have known anything of Leibniz s design. But the British Government (through the vigilance of the Hanoverian Regency, which may probably be traced back to the historian Johannes von Müller's knowledge of the existence of the document) had received a copy of the larger memorial from Hanover. In this country we have always liked to 'focus' our ideas about foreign policy as definitely as possible; and it was not till 1803, shortly before the renewal of hostilities between England and France, that the British Ministry thought it worth while to publish in pamphlet form a very effective summary of Leibniz s memoir. Clearly, the purpose of this publication was not so much to open the eyes of Britons to vast schemes of visionary conquest which in imitation of those suggested to Louis XIV by Leibniz the First Consul might have formed, as to revive certain very distinct references in the famous writer s statement to the importance of which the possession of Malta might prove to France. These references incidental to the days of Louis XIV, seemed to call very speedily for publication and comment in the days of Napoleon. You know that after the Peace of Amiens we found ourselves unable to evacuate Malta, and that, largely in consequence of this inability on our part, war broke out anew between England and France, before this very year 1803 had come to a close. The French immediately seized Hanover, and General Mortier, who commanded the occupying troops (which were by no means popular there)

obtained a copy of the design in its shorter form, the *Consilium Aegyptiacum* aforesaid. Thus it found its way to the First Consul, who may or may not have been edified by its perusal, and into the library of the French Academy, where Thiers and Michaud read it and formed incorrect conclusions from it, which I have no time for discussing.

One more remark, and I will leave the subject of the celebrated Design. Nothing could be more childish than to conclude that the treatment of Leibniz in this matter by Louis XIV (which political considerations are amply sufficient to explain) provoked him to the subsequent attacks made by him upon the great monarch and arch-disturber of the Peace of Europe. I have made myself acquainted with many of these attacks — both those of which Leibniz was beyond doubt the author and those of which the indefatigable Pfleiderer (who discovered not less than twelve anonymous pamphlets of the sort bound up in a single volume), with more or less certainty, attributes to him; and in none of them can I perceive any trace of a pettiness wholly foreign to the nature of Leibniz. He had to undergo, and underwent without loss of dignity, provocations of a much severer sort from a quarter where he deserved every consideration; while from Louis XIV he had nothing to expect, and in the King's refusal to receive him could have found very little to resent.

The most notable of these polemical invectives is the *Mars Christianissimus* — the most Christian War God — which belongs to the middle of the dreary period from the Peace, which was no peace, of Nimeguen and the outbreak of the so-called Orleans War in 1688, when Louis XIV, in Leibniz' words, threw off the mask, and on pretexts which were themselves so many insults, took the Empire by the throat. The *Mars Christianissimus*, written during the siege of Vienna, is a satire of uncommon force, and is marked by an almost savage irony not usually associated with the urbane lucidity of its author. The moderation of the

King — by which is meant his ruthless enforcement of the principle *un roy, une foy, une loy* — is the theme on which the satire harps. Pomponne has shown the way out of the stipulations of the Peace of Westphalia; Louvois has made men see the stuff of which German Princes are made. This is as it should be. That is just, according to Plato, which is of advantage to the strong; and Moses had a law of his own when he spoiled the Egyptians. The fact that he is commissioned with unheard of power shows whose Vicar Louis XIV is, while the Pope only registers his decrees. And so forth, with sarcasms almost savage in their bitterness, and a parade of charges made by others against France and her King, as to which the writer pretends to hold up deprecatory hands. There is, strange as the comparison may seem, a touch of Swift in all this — though the object of the veiled invective is a very different one from that of any of Swift s famous pamphlets.

Before he indited this exceptionally trenchant satire, Leibniz had passed into the service of Duke John Frederick of Hanover (1676), and on the Duke s death three years afterwards into that of his brother Duke (after wards Elector) Ernest Augustus and his wife Sophia, the youngest daughter of Elizabeth of Bohemia and the future acknowledged heiress of the English Crown. The two brothers resembled each other in many respects; they were alike very much intent upon the honour and glory of their House, and very careful of their own comfort; they preferred Venice and Paris — the former in those days the chosen abode of luxurious pleasure — to Osnabrück and Hanover, but they did what they could to make their own courts bright and enjoyable and, in a measure, refined. But they differed in both their religious and their political opinions; John Frederick became an ardent Roman Catholic, while Ernest Augustus, like his eldest son after him, remained a staunch Lutheran, without being much affected by the freer ways of thinking which his wife had brought from her brother s court at Heidelberg. In politics, John Frederick was one of those German princes

who followed the lead of Louis XIV so long as it was possible; while Ernest Augustus, with his eldest brother George William of Celle, though not so soon as he, became one of the mainstays of the Imperial and anti-French cause, influenced no doubt by the distinction gained by his sons in the Imperial service against the Turks, and by his own desire to secure for the furtherance of his dynastic ambition the goodwill of the Emperor.

That Leibniz should have served both these princes with equal zeal and devotion — for his biographical memoir of John Frederick is written in the courtliest strain of panegyric — does not seem very wonderful, more especially as his service to the elder brother was of so short duration. But it helps to account for the fact that the years following on the succession of Ernest Augustus to Hanover (from 1680 to about 1695) were, to judge from his literary activity as well as from his correspondence in them, the period of his career most congenial to himself as a politician — the aspect of his intellectual activities to which I must confine myself here. Leibniz, as he had only too much occasion for reminding the Elector George Lewis, both before and after the Elector had become King George I, was a faithful servant of the House of Hanover. None of the three chief steps towards the consummation of its greatness — the establishment of primogeniture as safeguarding the unity of the Lüneburg-Celle dominions, the attainment of the electoral dignity, and the securing of the English Succession — was taken without his co operation; but he laboured with the greatest zeal and the most effective application of his powers when he felt himself to be working at the same time for the advantage of the House of Hanover and for the general system of European policy which he had at heart. Thus, while he was in the service of John Frederick, I am not aware that he produced more than one political piece of any consequence — and this was the disquisition, written by him under a pseudonym of rather pedantic sound (*Cæsarinus Furstenerius*), on a topic which could hardly be held to be of

European interest, though the original Latin version (he afterwards brought out a French *replica* in dialogue form) went through six editions in a single year. It treated the burning question of the right of German princes not electors (Fürsten not Kurfürsten) to send ambassadors not mere agents (*legati* not *deputati*) to congresses and conferences; but it treated this question both with a great deal of legal and historical learning, and also with a great deal of common sense — which no doubt was the novelty accounting for the success of the publication. It was, in fact, a plea for the principle that actual power should be the recognised measure of formal rights. As these were days in which princes desired to have the privileges of electors, and electors to have the title of Kings — I do not say that analogies to this tendency could not be found in later times when kings are made almost as fast as they are unmade — Leibniz s admirably stated plea cannot be said to have been inopportune.

But how wide became his range of topics, and how varied were his opportunities, when from the *contentionuculæ* (as he elsewhere calls them) of German domestic politics he passed into the domain of general European affairs! And here it would be quite impossible to attempt anything like a survey, or to enter upon even so much as an enumeration of the sheaves of political writings from his hand — French, German and Latin, with translations, by his own or other hands, into different European tongues — gathered into their editions of his works by Klopp and Foucher de Careil, and supplemented by the researches of Pfleiderer. One tractate discusses the necessity of pausing when things were going badly against the Turks, and when the great Elector of Brandenburg was still in one of those spiral phases of his policy which give so much trouble to historians convinced of his mission — a necessity which led to the Truce of Ratisbon in 1684. Another is concerned with the French declaration of war in 1688, answered by a counter-manifesto on the part of the Emperor Leopold, which was

misattributed to Leibniz by his biographer Guhrauer, but which was dissected in a memorandum certainly written by him for the use of the imperial ministers and summing up, with not less force than elaboration (it extends through twenty chapters) the whole case against France as guilty of a systematic violation of the public law of nations.

A third treats the outlook at the end of the campaign of 1791 (written after the battle of Fleurus), when a new effort seemed necessary if the cause was not to collapse, and Leibniz in a series of "consultations" showed how closely he had followed both the conduct of the war and the attitude of the allies and neutrals towards it. These are but specimens of the efforts of his indefatigable pen in the period of his service under Ernest Augustus; and I only wish I had time to illustrate the completeness, the vigour and the general effectiveness (that I think is the right word) of these productions.

In 1698 Ernest Augustus was succeeded as Elector by his son George Lewis; but, largely no doubt because of Leibniz' devoted attachment to the widowed Electress Sophia, and her continuous pleasure in his society and correspondence, he remained in the service of the House. But the marriage of her daughter Sophia Charlotte to the Elector Frederick of Brandenburg (afterwards King Frederick I of Prussia) had already for some years caused Leibniz to become a frequent visitor at Berlin. This Princess (a woman of perhaps bolder mind than her mother, though less distinguished by the kindly humour which in the latter almost invariably tempered the expression of an acute intelligence) was, in her turn, much attached to Leibniz and glad of his frequent presence where 'the infinitely small,' (as it is to be feared she paraphrased the idiosyncrasy of her consort) was the ordinary *pabulum* of existence. Moreover, he was fully aware of the long-standing friction between the two electoral Houses, and he did his best, both by a skilful exposition of means by which pettly grievances between them could be removed, and in every other way in his power, to aid Sophia

Charlotte in accomplishing the purpose for which she had been married to so uninspiring a husband. There can be no doubt of the loyalty of his exertions on this head, and he greeted the attainment by Sophia Charlotte s consort of the object of his life — the Prussian Crown — with cordial sympathy; but it seems to me little short of absurd to represent him as actuated by the belief that the future of Germany lay with Prussia, and not with Austria. Not only was he afterwards attracted to Vienna, as it is impossible to ignore, more potently than he ever had been to any other capital; not only is it probable that but for certain ecclesiastical influences he would have found a permanent place in the Emperor's service; but there is no political principle more consistently upheld by him than that the strengthening, not the weakening, of the imperial authority, of which in this age there was no thought of divesting the House of Habsburg, was essential to the preservation of the European system.

It is from this point of view, as much from that of preventing the overthrow of that system by the undue aggrandisement of France that he treats the question of the Spanish Succession, and comments on the progress of the war carried on (from 1702 onwards) during thirteen years for its settlement. In the first of his pamphlets belonging to this period he denounces the sacrifice of the Habsburg claims to the entire Spanish Monarchy by the Partition Treaties as poltroonery; and his activity in the critical months ending with the acceptance by France of the last will of Charles II was extreme: these writings fill a volume and a half of Foucher de Careil, where they are arranged in wild chronological disorder. And here should once more be noted his literary inventiveness of *mise-en-scene*. A Venetian sets his fellow *Signori* right on the subject of their interests in the struggle; a Dutchman of Amsterdam retorts on a sophistical publication purporting to come from Antwerp 'but fabricated in a French shop;' Cardinal Portocarrero and the Admiral of Castile confer in a dialogue

serving as a prelude to a manifesto drawn up by Leibniz for the use of Archduke Charles, when in 1703 he was preparing for a roundabout journey into Spain. Leibniz was concealed beneath all these disguises; nor was there an important phase in the war which he fails to accompany by his comments. It is quite true that what may be called the Hanoverian interest is not lost sight of, the conferring of a great command upon the Elector George Lewis being repeatedly urged; but except in one pamphlet (1703) where it is stated, probably with perfect correctness, that this demand would certainly have been granted had William III lived long enough, it is only incidentally made. What was the dominant thought of all to the mind of Leibniz as a politician in these years may be gathered, even more from his writings on the war, from his writings concerning the Peace which ended it. The most important of these, the well-known *La Paix d Utrecht inexcusable* (1713) was written not only with the object of exposing the conduct of the Maritime Powers — which in the case of England was so cynical as hardly to need exposure, for though the Peace of Utrecht can be defended, the methods by which it was concluded cannot. It was also designed to justify the Emperor for holding out alone; and, even during the negotiations afterwards carried on at Rastadt, Leibniz stuck to his guns professing to tender to the Emperor — for his own ears only — advice which nothing but conviction and trust in the future could have induced him to offer when the eleventh hour had all but passed. In such a mood Leibniz was perhaps unlikely to respond with much fervour to the *Project of a Perpetual Peace*, forwarded to him by that amiable fellow-philosopher, the Abbé Bernardin de St. Pierre which (if I may be pardoned so personal a reference) I remember discussing in a lecture delivered at the opening of the new Owens College a good many years ago. Even amiable philosophers, when they touch the border of politics, are apt to say dangerous things, and Leibniz in 1715 was not prepared to listen to the suggestion that a suitable step

towards the establishment of Eternal Peace would be the dissolution of the Holy Roman Empire. His own dream was an Alliance of Nations; but the Empire, strengthened as he desired to see it, seemed to him the natural nucleus of such an alliance, rather than an obstacle in the path towards it.

In the meantime, at least one of the political ends for which he had laboured long and unintermittently, though at first with very doubtful prospects of success and at last with small thanks from those who had benefited by his efforts, had been accomplished; the English succession was settled, and though his honoured mistress and correspondent, the Electress Sophia, had gone to her rest, the House of Hanover had been established upon the English Throne. I should not attempt on this occasion, even were time left to me, to summarise the history of what was done and what with still greater wisdom was left undone by the House of Hanover to bring about this consummation; but I should like before I close to say a very few words as to Leibniz s share in these transactions, though even of this I can only refer to some aspects. In January 1700 — when there was as yet no apprehension of the death of William III or of the impossibility of averting the outbreak of a European War — Leibniz and the active English ambassador, Cresset, were present at an interview between the Dowager Electress and her brother-in-law of Celle, the intimate friend of William III; and at this meeting the line of conduct was settled which was on the whole (though not without some occasional deviation) faithfully observed by the Electress and her son. In July, the Duke of Gloucester died, and the Electress became heiress presumptive to the throne. But this event, though it called for increased vigilance, made no alteration in the conclusions reached at Celle, which were elaborated by Leibniz in the *Considerations on the rights of the House of Brunswick to the English succession* drawn up by him after the meeting. What interests us in this statepaper is not only its bearing on the immediate issue, on which I need not dwell, but the

farsightedness of some of its wider deductions. As to the justice of the claims of the House of Brunswick — and it was this consideration of justice which (as we know to her honour) troubled the Electress Sophia as it did many an honest Englishman of the time — he argues that the exclusion of Roman Catholics and the descendants of Roman Catholics from the succession is not a matter for the consideration of anyone except the English people; and France (he rather sophistically adds), which proposes to place the Duke of Anjou on the Spanish throne in accordance with the will of the Spanish nation, should be the last to object. As to the actual end in view (and here he may have thought of the unconcealed apathy of the future King George I towards the prospect of adding to his sovereign authority as Elector that of a constitutional ruler over-sea), it is perfectly true that a King of England has need of a great deal of prudence and moderation in order to govern a difficult people and one very jealous of its liberty. On the other hand, the glory of a prince lies, not in attaching himself to his ease and his pleasures, but in the consciousness that he is great only for the purpose of securing the welfare of all. These are noble words, and worthy, not of a servant of princes or princelings, but of one who fitly aspired to be the adviser of the ruler of a great and free nation.

This, however, was not to be; and perhaps we may think it well that Leibniz was not destined to be lumped by English prejudice — a prejudice, let us allow, not without a certain amount of provocation — with the rest of the German counsellors and favourites of our first Hanoverian King. As a matter of fact, the height of his activity belongs to the earlier rather than the later stages of the Succession question — to the period intervening between the death of the Duke of Gloucester (July 1700) and the Act of Settlement which named the Electress Sophia and her descendants as successors after the childless Queen Anne (August 1701), and the conclusion (in the following month) of the Grand Alliance at the Hague. These two events

were never dissociated from one another in the minds of Leibniz, and, in another set of *Considerations on the matter of the English Succession*, he showed that they had both been present to the mind of William III, when he delivered his speech from the throne (February 1701), of which the Act of Settlement had been the direct result. The War of the Spanish Succession was in the eyes of both William and Leibniz the War of the English Succession also; and in the Peace of Utrecht, which settled the Spanish question, he was actually desirous of inserting specific conditions that would in his opinion have placed the settlement of the English beyond the reach of doubt.

But this was later. Even when he was at what I have described as the height of his political influence, he held no official political position at Hanover, and was in no sense minister of the Electress Dowager, though the reports of her special agent in London, Falaiseau, passed through his hands. With Bothmer, who in the early years of the century began to be largely entrusted with the conduct of Hanoverian diplomacy in its relations to both England and Holland, he seems generally to have been on excellent terms. But from 1705 onwards, when after the reunion of Celle and Hanover Bernstorff became the leading minister of the Elector George Lewis, and Bernstorff's right hand man, the Huguenot Robethon, was charged by him with reports on the progress of the Succession question, Leibniz' communications with the Electress Dowager on the subject become essentially those of a private correspondent. They are not the less interesting on that account, or the less well informed. Thus, he knew of the fateful change of ministry in England long before it actually took place in 1710: 'I have,' he writes, 'friends of importance among both Whigs and Tories, who from time to time supply me with good information because I am known to have the *entrée* here with the *padronanza*' (as who should say, I have the key of the house). There are some people in England who would like me to

pay a visit to that country, and I find that things would be explained to me there which could not be communicated by the ordinary channel. But I avoid that in order not to excite jealousy." Leibniz, in political enquiries as in historical research, was always desirous of securing information at first hand. But, in the present instance, no such opportunity was, in point of fact, accorded to him; and he had to content himself with correspondence and interviews with English agents who came to Hanover, and with the consciousness that, so far as in him lay, he had from first to last neglected no opportunity and left no stone unturned towards the achievement of the great result.

Before it was achieved, his best friend and patroness the old Electress Sophia had taken her last walk in the gardens of Herrenhausen, and some of those who knew, or professed to know, attributed her breakdown to the agitation caused by the anger of Queen Anne at a forward step in the relations between the two Courts — the demand of a writ of summons for the Electoral Prince to the House of Lords — of which she strongly disapproved. Leibniz, though he heartily applauded this step, was not responsible for it; and with the death of the old Electress his political influence and favour at Hanover were likewise at an end. For the Elector George Lewis, who soon afterwards, on Queen Anne s decease, ascended the English Throne as King George I, Leibniz was, as has been well said, nothing more than an admirable instrument when argumentative memorials were required in support of the interests of his dynasty. His advice was not valued, or wanted, by George and his ministers; when he tendered some very sound counsel through the Electoral Princess as to the expediency of forming a ministry out of both parties instead of Whigs and none but Whigs, the excellent Caroline was instructed to inform him that such matters could be best managed on the spot. She was the youngest of the three high-minded and high-spirited women who enjoyed and valued his

friendship; but neither she nor the old Electress Sophia can be said to have had a will of her own in politics, and Queen Sophia Charlotte, who had one in all things, could not in this sphere often exercise it except indirectly. And Caroline had special reasons for not importuning her father-in-law, King George I, who disliked her almost as much as he disliked his son, her husband. When Leibniz indicated that he would gladly serve as historiographer royal in England he was plainly told to finish the historiographical task he had undertaken at home.

I am glad, almost, that time prevents me from dwelling on an episode in the career of Leibniz — unhappily it was the closing episode — which reflects little credit on Bernstorff and on Bernstorff's master. I would say that it reflects little credit on the earlier successors of George I, but that it would be perhaps unreasonable to expect any of them after George II to have remembered Leibniz or the great historical undertaking which his father and his father s ministers had for years urged, ordered — more than ordered — the great scholar to complete. And George II did actually go so far as to command the publication of the *Origines Guelficæ* (in which, as treating of the dynasty, he naturally took more interest than in the companion work, which had a wider basis and a wider scope), and four out of the five folios of this part of the undertaking which Leibniz had left to be executed by his assistant, successor and indefatigable backbiter Eckhart, were actually published in 1753. The *Annales Brunsvicenses*, which Leibniz himself had in substance completed, had to wait nearly a century longer, when, in the years 1843-5, they were published as part of Pertz's *Monumenta Germaniæ*. Thus it was as part of a great national historical collection, not as the record of one particular principality, that the great historical work which Leibniz had been unable to lay at the feet of George I was given to the world.

It is not as a historian that I have spoken of Leibniz to you today. I wished to add a note — it is no more — to my dear friend and honoured colleague s chapter only from the point of view of the political endeavours of the great man who to me is familiar from this side only or chiefly. It is for those of you who have read Leibniz as a philosopher and who know how as such he strove to bring all his studies — mathematical, linguistic and the rest — into harmony with his philosophical conceptions of the purposes of the Universe — it is for you to say whether the lesser side of his activity is out of harmony with the greater. I should be surprised if such were your conclusion either as to his religious or even as to his purely temporal politics; or rather I should attribute it to the imperfect and fragmentary nature of my note. Genius is not pieced together out of dissimilar or discordant elements; and the self-education of a great man, which is the highest type of all education, has for its end, unattainable yet never to be renounced, the perfection of all the powers which he holds in trust. No doubt, Leibniz attempted too much. No doubt, in the words of the most eminent of his biographical critics (Kuno Fischer) Leibniz' original fault was the impulse, which he found irresistible, towards multiplying the tasks and problems of his intellectual life, together with the spheres of his personal activity and the duties they involved, in a measure which no human mind and no single career could ever fully meet. That was his fault — but it was not a fault which posterity can visit heavily on one who, as I have already reminded you, did perhaps more than any other modern has done to suggest and supply means and methods both for the distribution of higher intellectual work and for the cooperation of those devoted to it in learned bodies which would recognise research — in the widest sense of the word — as the crown of their endeavours. That, I say, was his fault; his merit was the willing sacrifice of himself to the cause of progress, which is the cause of truth, however large be the unavoidable admixture of transitory

error. The genius of Leibniz, his love of truth, which is eternal, and his aspirations for harmony, which is from on high these were true to themselves even in that secondary and subsidiary branch of his intellectual activity to which, for this reason, I have thought it not unfitting to call your attention to-day.

The Biographies

Leibniz' home in Hanover from 1698 till his death in 1716

Nineteenth century engraving of Leibniz

Life and Philosophy of Leibnitz (1856) by Alexander Campbell Fraser

From 'Essays in Philosophy'

The lately republished philosophical writings of Leibnitz are the productions of a species of intellectual labour that is very rare in this country, but of which, in Germany. France, and America, the press is giving forth some original and many republished specimens. The amount of republished metaphysical literature of the higher kind which has appeared in foreign countries within the last thirty years, is worthy of remark. Some idea of it may be formed from any common catalogue of books recently issued from the press of Leipsic, Berlin, Paris, or Boston. The labours of the illustrious Cousin in this department are well known. The works, in whole or in part, of Plato, Proclus, Abelard, Des Cartes, André, and Pascal have reappeared under the superintendence of this eloquent founder of the modern eclectic school of France.

Containing as they do the results, and in many respects splendid results, of purely abstract thinking, the works of Leibnitz are singularly fitted for contributing to imbue the mind of an ardent student with comprehensive and lofty speculation. While his writings abound in daring hypotheses, they have, nevertheless, greatly advanced metaphysical science, by rendering current a multitude of new ideas; and the fact of the continued circulation of an amount of abstract thought so great, so peculiar in its kind, and so fitted to set other minds to work, as these books contain, can never be unworthy of the consideration of those who would observe and study literature in its higher relations. Besides their intrinsic value, they are connected with an important epoch in the history of modern speculation. This philosopher

looms vast even in the distance, at the entrance of the labyrinth of recent German Philosophy.

Though a curious combination of circumstances has hitherto preserved the surface of the British mind, in a great measure, unruffled by an influence powerful enough to create so much commotion on the continent of Europe, there are signs in the literary horizon which betoken a change, for which society in this country would do well to be prepared. By the well-regulated study of these unwonted topics, we may not merely disarm the enemies of religion, of what in other times has been, and will continue to be, a favourite weapon of assault, but we may even convert that weapon into an instrument of use in the service of an enlightened Christianity. The interest lately revived elsewhere in the life and labours of Leibnitz, and indicated among other means by various recent publications, suggests some meditation upon the leading events in his biography, accompanied with a few historical and speculative notices, as an introduction to that great department of knowledge of which he was so distinguished a cultivator, viz. Metaphysical Philosophy.

Perhaps these two last words are fitted to excite feelings of repugnance in the minds of some readers, as relating to something that is conceived to be at best vague and unproductive. The tendencies of public opinion in Great Britain, in the former half of this century, have evidently been greatly averse from these speculations. The section of society given to abstract meditation has never in any age been a large one; and the recent wide extension of a certain measure of intelligence has perhaps helped to diminish it, by putting the current literature more under the control of a public for the most part necessarily busy with the affairs of practical life. If we except the rising symptoms of a coming change — indicated partly in the poetical contemplations of Coleridge and the logical philosophy and learning of Sir William Hamilton — no literary efforts are even

contemplated which involve purely speculative research; and hardly any concern is manifested for the philosophical pursuits of other nations. Metaphysical Science cannot, from its peculiar nature, be made generally popular till the exercise of reflection has become more common; unless, indeed, as sometimes happens, the science itself is degraded, so that (while the name Metaphysic is retained) those who profess to be its votaries are conversant exclusively, not with the most subtle and evanescent, but with the simplest and most generally seductive class of the objects of thought.

The present is a remarkable, and, indeed, anomalous historical epoch. In these islands it is, and has been since the commencement of this century, a period of rapid physical and social progress. Men have gained an increased knowledge of the laws and processes of matter, and thus the world is becoming a more convenient place of habitation. The principle of commerce has been developed to an extent unknown in the ancient world. The present revolution in the means of social intercourse and communication seems to be preparing the way for other changes, about which it is hardly safe to speculate. All the increased "subjection of matter to mind" which the world, and especially this country, has witnessed since the principles of the Baconian philosophy have become popular, must be indeed gratifying to every lover of his race. And in the more sublime departments of Physical Science the same progress is visible. Geology is contributing the details of the past history of the-planet on which we live. The telescope is making magnificent disclosures of the distant regions of the material creation. Nor is public interest confined to what is merely physical. Society itself is undergoing fundamental changes; and the "science of society," under its twofold form of civil and ecclesiastical, is the theme of discussion and controversy.

An age in which controversy turns on first principles needs, and will soon demand, a Metaphysical Literature. That state of knowledge and of

general opinion is not a hopeful one, in which the thoughts and energies of men are directed exclusively towards physical or economical science. And when the intellect is in a state of fermentation, bare facts, separated from principles, excite only a feeble interest. Men then feel that beneath the stir occasioned by incessant activity among the outward events of this passing world, there lie hid the invisible elements and springs of those external changes of which this strange and dangerous life is the scene. Within and immediately around that inner circle, is the domain peculiar to Philosophy. The more deeply thought is exerted on any subject, the further is it compelled to go within the dominions of this "science of sciences." The soul there casts about for its anchorage in the ocean of thought.

The need for a First Philosophy, of the kind we have indicated in the foregoing paragraph, is not indistinctly referred to by Lord Bacon:—"Because," says he, "the distributions and partitions of knowledge are not like several lines that meet in one angle, and so touch but in a point, but are like branches of a tree that meet in a stem, which hath a dimension and quantity of entireness and continuance, before it come to discontinue and break itself in arms and boughs; therefore, it is good to erect and constitute one universal science by the name of '*philosophia prima*,' primitive or summary philosophy, as the main and common way, before we come where the ways part and divide themselves; which science, whether I should report deficient or no, I stand doubtful."

The Metaphysical spirit makes itself manifest in various forms; and this passage from Bacon in several respects illustrates the difference between the two great classes into which philosophers may conveniently be divided, according as they employ one or other of two modes of research that differ in their principles, methods, and results. One class includes those who would merely generalize from experience; and whose highest laws are in consequence only their most extensive generalizations. The other class

assume their first principles as given in the very act of exercising observation, and by demonstration endeavour to reach the extreme results of philosophy. It is not easy to find a nomenclature sufficiently comprehensive, and yet distinctively characteristic, to admit of suitable application to these schools. Probably, that suggested by Sir James Mackintosh is sufficiently exact for our purpose; and we may term the former of the two classes we have referred to Observational, and the latter Speculative Metaphysicians.

Leibnitz is the type, in modern times, of an abstract thinker of the purely speculative school. It is curious to trace the connexion between the secluded and seemingly ineffective study of what Bacon calls the *philosophia prima*, in the form in which it appears in this school, and the great external and social changes in the world. The "Advancement of the Sciences" is obviously connected with the astronomy of Newton and Herschel. The "Wealth of Nations" is an acknowledged cause of many recent alterations in modern society. The "Essay on Human Understanding" has plainly influenced the subsequent current of British thought. Not less surely, though less obviously, has the more purely speculative philosophy of that school, in which Leibnitz is one of the most illustrious names, been connected, for good and evil, with important modifications of those minds by which public opinion must be formed. The intimate relation between the labours of men of this class, and that meditative style of Christianity which is displayed in the writings of some of the great names in the Christian Church, is also manifest. The influence of Idealism and the higher Metaphysics as operative forces in society, becomes more apparent when we observe how efficacious their spirit has been to neutralize a vulgar sensationalism.

The study of the systems of Philosophy in all their variety, and of the lives and labours of various philosophers, is to be encouraged for many reasons. It supplies curious and useful thoughts, which might never

otherwise have been suggested, and it also stimulates reflection in the student. The history of the erratic course which the human spirit has taken in the experience even of profound thinkers, is besides fitted to moderate dogmatism. The men of mightiest genius are found often to have fallen into the most signal errors. It is morally useful to train the mind in the habit of calmly apprehending and appreciating new doctrines, however opposed to what one has previously been accustomed to entertain. “Man,” says Pascal, “is made for thinking. To think as we ought is the sum of human duty.” Habits of abstract meditation have, moreover, a use additional to their absolute value to the individual speculator; they accustom men to a kind of exercise which must always be closely connected with the great progress epochs of history; and by the lucid and comprehensive views which they foster, as well as by the invigorating effect of the act of self-inspection, they become a potent force among those at work in society.

Some knowledge of the personal history of Leibnitz is likely, besides its intrinsic use and interest, to be a valuable help to the reader who desires to understand and appreciate his writings. It is satisfactory to find that most of the materials collected by former biographers, eulogists, and commentators, along with some new information, have lately been condensed into a useful biography by Dr. Guhrauer, who has already laboriously edited several of the works of Leibnitz, and contributed to the revival of an interest in the philosopher. His monograph is well fitted to bring the reader into intercourse with the great German, and with those numerous contemporaries with whom he maintained a “literary commerce” during the grand period in which he lived.

Gottfried Wilhelm Leibnitz was born in Leipsic on the 21st of June 1646. He was descended of an ancient family, that had gained distinction in civil and ecclesiastical affairs. His grand-uncle, Paul Leibnitz, attracted notice in the wars in Hungary, and was highly honoured by the Emperor Rodolph II.

We must not omit a special allusion to the eventful epoch of the philosopher's birth. Just a hundred years before, Luther had rested from his earthly labours, during the excitement of the most memorable religious and social change which the world has witnessed since the introduction of Christianity. But soon after the Reformer's death, Christian doctrine, owing in a great measure to the want of Christian organization in the Church, became, especially in Germany, gradually separated more and more from the hearts of nominally Christian men. The coldness of mathematical demonstration represented Christianity in the pulpits and halls of the country of the Reformation, where, in the seventeenth century, the icy orthodoxy of Calixtus took the place of the fervid sermons of Luther.

The period of the Protestant Reformation was a time of much general excitement and progress in society, as well as the era of a great revolution in the Church. The modern reformation of Philosophy was, however, formally inaugurated at a later period. During the fifteenth and sixteenth centuries, the recovery and revived use of the remains of antiquity supplied, for the most part, sufficient materials for literary activity. The controversy between the Aristotelians and the Ramists in the sixteenth century had, moreover, diverted men's minds from the production of a Philosophy altogether modern and reformed. The birth of Leibnitz was just subsequent to the time when, the strength of the evangelical movement having unhappily abated in most countries, a movement towards a reform of Philosophy had succeeded. The mind is not likely at any time to be strongly stirred in a science like Theology, without being directed to "the science of sciences." A New Philosophy was making its appearance in England and France. Bacon's "Advancement of the Sciences" appeared in 1605, and the "Method" of Des Cartes in 1637. In each country thought and research had assumed a fundamentally different form. In England, the practical character of the people well agreed with the lessons of comprehensive sagacity that were

given forth in the works of Bacon; and these naturally led to the solid and cautious, yet withal little imaginative form, which metaphysical science assumed afterwards in the works of Locke; and through Locke, generally, in British philosophy. In France, on the other hand, the philosophical writings of Des Cartes had awakened that style of speculation which cannot be wholly dormant while the spirit of Plato and St. Augustin attracts sympathy in the world, and which in France, subsequently to Des Cartes, was adorned and elevated by some of the noblest and worthiest spirits of modern times. Besides the lives of Malebranche and Fénelon, those of Pascal, and Arnauld, and Nicole, and the other recluses of Port-Royal, give to the Cartesian a more sacred interest than can be attached to any other modern school of Philosophy. Although this peculiar feature of its history is marred by that mystic quietism which the monastic genius of the Catholic Church tends to foster, it is encouraging to find even this imperfect illustration of the manner in which Christianity may be allied to general speculation.

But Germany was thenceforward to be the European focus of Idealism, and of abstract thinking of every kind. In that country, previously to the rise of the Leibnitzian philosophy, there had been no manifestation of the new spirit of reform. The labours of Leibnitz virtually mark the commencement of the extraordinary course which metaphysic has since run in the native country of that celebrated thinker. Since then, the principle which at first separated the schools of Locke and Leibnitz has modified the currents of thought in Britain and Germany, and is thus connected with many of those characteristics by which the British is signally distinguished from the Continental mind. Since then, too, Germany has been the centre of European speculation, and has exhibited some of the most extraordinary phenomena in the history of human thought. There, amid the successive revolutions of more than a hundred years, every abstract question has been debated that the mind of man can entertain; and there has been added to

preceding ones, perhaps the most remarkable and instructive of all the records of the clouded wanderings of human reason. The discussions raised by Leibnitz have given birth to the philosophical systems of Kant, Fichte, Schelling, and Hegel, and so to the now enormously accumulated materials of the Teutonic metaphysics.

The father of Leibnitz was Professor of Morals in the ancient University of Leipsic. He died during the childhood of his son. By his pious mother, the thoughts of the young Gottfried Wilhelm were much directed to religion; and this guidance no doubt gave to his subsequent speculations much of that theological cast by which they are distinguished. Both his parents were Lutherans. The first twenty years of his life were spent chiefly in Leipsic. In the Nicolai School of that city, and also in the University, which he entered in 1661, he gave early evidence of his peculiar type of genius. His powers of mind were directed, in turn, to almost every object of knowledge. He eagerly studied history and the classics, in which his reading extended far out of the beaten track in which the ill-judged exertions of his narrow-minded teachers would fain have restrained him. It was, however, when he was introduced to Logic and Philosophy, that the strength of his genius, and the special direction of his mind, were fully shown. He read Aristotle, Plato, and Plotinus, and revelled in the subtleties of the scholastic metaphysics — that stimulant of the human intellect for so many hundred years. In his father's richly-stored library, he read, almost during the years of childhood, Scotus, and Fonseca, and Rubius, and Suarez, and Zabarella, and other schoolmen, with special delight. To the literature of theology he was no stranger, even at this early period. His thoughts were directed to the/ deep controversies about election and grace, by the works of St. Augustin and Luther, the reformed theology, and the writings of Antony Arnauld. The amount of learning accumulated by this precocious student before he entered the University appears to have been prodigious. Soon after his

entrance on academical life, Des Cartes fell into his hands. His tendency towards eclecticism, afterwards more fully displayed, was even then shown in endeavours to harmonize Plato and Aristotle, Des Cartes and the schoolmen. The scholastic logic and philosophy was then dominant in Leipsic, as it was in most of the other universities of Germany. The formal spirit, as well as the mechanical style of instruction then generally prevalent in Germany, harmonized ill with the fire of speculation that was already kindled in the bosom of the youthful Leibnitz. A thousand chimeras of speculation floated through his brain. He started a thousand difficulties with his teachers and associates. Even Bacon, and Des Cartes, and the later Philosophy, served to awaken rather than to convince him. His mind was too independent to be moulded by others. His intellect revolted from the authority of his masters. In solitude, he cherished the most ardent views of the advancement of knowledge and the progress of man.

The whole history of the early years of Leibnitz forms a precious record of what we might call *speculative experience*. It reveals the self-educating genius of the really original mind, and shows a singular development of abstract thought at an age when the attention is usually engrossed with the objects of sense. In his recorded experience, at the age of sixteen, are to be found the dim forms of those problems which agitated his thoughts during the most active years of his life. For days together, as he tells us, he was wont to pursue his walks alone in the woods of Rosenthal, near Leipsic, revolving in his soul the first principles of that mysterious life, to a consciousness of which he had become awake. Before he had studied mathematics, physics, or morals, he was led to the conception of the higher Philosophy. He felt, what can be felt only by the true metaphysician, — the need for a scheme of eternal first principles on which all knowledge must depend. This was the theme of his earliest writings. His speculations on a universal language, grounded on what he calls the alphabet of thought, and

his treatise *De principio individui*, published when under twenty, display the metaphysician capable of going back to first principles, and of following consequences intrepidly to their issues. In these labours of this early period, we have a fair specimen of the whole intellectual life of Leibnitz. They are, moreover, eminently characteristic of the National Philosophy which he originated.

Owing to a difference with the University authorities, Leibnitz left Leipsic, and his native country of Saxony, and in 1666 went to the University of Altdorf. There he received his degree in law the same year. He thus belongs to that class of distinguished philosophers who have been bred to the legal profession. The philosophy of law naturally attracted his thoughts. At the age of twenty-one, he published a tract on jurisprudence, which forms an epoch in that science. "There was only one man in the world," says Hallam, "who could have left so noble a science as philosophical jurisprudence for pursuits of a still more exalted nature, and for which he was still more gifted; and that man was Leibnitz. He passed onwards to reap the golden harvests of other fields."

After leaving the University, he led a somewhat desultory life for several years. During the interval between 1666 and 1676, he visited several of the German universities, which must have served to confirm his academical tendencies. A professorial chair was soon within his reach, but was declined by one whose projects of Reform in Philosophy were too comprehensive to be confined within the narrow limits of a University. In 1667 he removed to Frankfort, where he became Secretary to the Baron von Boineburg, and was patronized and employed by the Elector of Mentz. During his residence in the Electorate, he was much engaged in public, legal, and diplomatic labours, as well as in literary pursuits. Yet his mind was all the time pervaded by the great idea of his life. He found time to edit the Antibarbarus of the Italian Nizolius, and, besides, was active in theological

controversy. The Baron, who was born in the Lutheran Church, had joined the communion of Rome, and was much interested in a scheme for the union of the Romish and Lutheran Churches. This eclectic movement was not forgotten by Leibnitz at a later period in his life.

His speculations about this time are marked by the vagueness naturally characteristic of one who had cast off the authority of others, and had not resolved a system for himself. It was the transition-period in his life, during which his recorded thoughts teem with the germs of those ideas that are found in a matured form, and in profuse variety, in the *Nouveaux Essais* and the *Théodicée*.

These years are still more marked as the period of the commencement of that literary intercourse which afterwards accumulated so enormously, and in which Leibnitz always appears in the centre of the thinking spirits of his age. It commenced, and was maintained, among others, with kindred minds in the Cartesian school — with Malebranche, the recluse author of the *Recherche de la Vérité*, of whom we have the interesting records that his genius lay dormant, till it was kindled by contact with the speculations of Des Cartes, and that his controversy about Idealism with Berkeley, on the only occasion they ever met, so roused the ardour of the then aged philosopher, that his death is recorded a few days afterwards — and with Arnauld, the pious, contemplative Jansenist of Port-Royal, the theological and philosophical antagonist of Malebranche. Leibnitz visited Arnauld at Paris in 1672, and remained in that brilliant metropolis during the greater part of the few following years. In 1673, he went for a short time to London, and came in contact with many of the English *savans* — among others, with Collins and Sir Isaac Newton. Shortly before his death, for the first and last time, Spinoza, — that type of the demonstrative metaphysician, received a visit at the Hague from the now rising Saxon philosopher. From the wonderful logical concatenation of the system of

Spinoza, his mind must have received a powerful impression. From about 1674, his intercourse with Hobbes may be dated. The sceptical Bayle seems to have been the useful instrument of the more full development of his ideas — an indirect benefit which the cause of truth has often received from the labours of scepticism.

The year 1676 is an era in the life of Leibnitz. Death had taken away his patrons the Elector of Mentz and Von Boineburg. He was himself in Paris. But his reputation in Germany was now of the highest. He accepted an offer, tendered for the third time, to reside at the brilliant literary court of Hanover. Thus commenced a connexion which lasted during the remaining forty years of his life, and in which he held a succession of legal and literary offices, under the Duke John Frederic and his successors, the Electors Ernest Augustus, and George Louis, — the latter of whom became George I. of England two years before the death of Leibnitz. The additional means enjoyed by him at Hanover for gratifying the peculiarities of his genius, were used with his characteristic ardour. The variety of his aims during these forty years is marvellous. The development of his speculative genius continued to advance, and his thoughts, stirred from their lowest depths by the cycle of the sciences during that whole period, would present an exceedingly curious spectacle, if we could have these changes in the current of the soul represented to the senses. History, languages, geology, mathematics, chemistry, medicine, politics, and theology, in turn secured his attention, and his busy spirit collected the various learning of each department. His almost superhuman versatility of mind secured for Leibnitz the highest distinction in most of the sciences which come within the range of human thought. In history he laboured for years on the antiquities of the house of Brunswick, and the early annals of Germany. An experience of the extreme difficulty of historical researches suggested to him what may be styled the comparative anatomy of languages as an instrument for

facilitating his efforts to travel backwards into the past. To the study of languages he accordingly applied himself with incredible zeal. He laid ambassadors and Jesuit missionaries under contribution for philological facts. In prosecuting this one department of investigation, he maintained a vast correspondence. Facts gathered from China and the Eastern tongues served to animate his exertions, and added new materials for speculation. Not content with the records and memorials of the past, contained in the words and works of man, he interrogated the globe itself. In his speculations on the physical vestiges of its early history, we find curious anticipations of recent geological hypotheses. These may be seen in a small tract entitled *Protogea*.

Leibnitz was able, in an unusual degree, to combine the external and the contemplative life. A great part of his time was busied with the conduct of civil and ecclesiastical negotiations. His correspondence regarding the unity of the Church, with the Landgrave of Hesse-Rheinfels, with Arnauld, with Spinola, and with Bossuet, which occupied more or less of his time during twenty years, deserves some distinct notice. The reunion of the Protestants with the Church of Home was then placed by Leibnitz in the first rank of those questions on a settlement of which his heart was set. By his philosophic mind this adjustment was felt to be nearly related to his previously ascertained speculative doctrine of the theocracy, and a universal hierarchy. His veneration for the Romish theory of a living infallible authority, supplementary to, and expository of, the written word of Scripture, was indeed coupled with a protest against the existing corruptions of the Church, and an expression of his fear that a formal adherence to Rome on his own part might, from (the practical intolerance of the Romish theologians, cramp the freedom of his philosophical speculations. Though he thus firmly resisted all solicitations to join the outward communion of Rome, yet his heart, and perhaps his conviction, was accorded to the system

of the hierarchy. His love for scholastic learning may have biassed his inclinations in this direction, and his comprehensive genius, like that of many other kindred spirits, found gratification in the vast unity and completeness of the *ideal* Catholic Church, with its ritual, and its organization, apparently so suited for all the various characters and circumstances of those whom it desires to embrace within its ample fold, and all bearing so much the semblance of a fitting picture of that still vaster organization wherein he loved to contemplate the whole universe reclaimed into the harmony of the government of the All-holy and the All-wise. Yet this part of the life of Leibnitz is not one that can be studied with unmixed satisfaction. The source of those oscillations of opinion which are sometimes the consequence, in honest and devout minds, of a many-sided view of an extremely comprehensive subject, seems hardly sufficient to account for the inconsistencies of Leibnitz in his negotiations with the representatives of the Church of Rome.

During the later years of his life he was much engaged with another project of ecclesiastical union. A scheme was promoted by him about the year 1697, (under the auspices of the Courts of Hanover and Berlin,) for a general union of the Protestants against Rome, and especially of the two great sections of Protestantism, — the Lutheran and the Reformed. It was quite suited to the eclectic genius of the philosopher, and was long pressed by him on the attention of Europe. He laboured to destroy what he called the “idle phantoms” by which the Protestant Churches were separated. But the defects which marked his other scheme of universal Christian communion, marred this project of Protestant union. Both were essentially political and philosophical. They fail to recognise Religion and the Church as independent powers, whose liberties are essential for the accomplishment of the ends of the Christian society. Even this philosopher seems not to have felt, that when religion becomes the slave of merely human authority, it

ceases to be either the great instrument of civilisation, or the means of preparing men for full union in the City of God. The pious Spener, who had personally experienced its supernatural force, predicted the ill issue of the Conference for Union held in Hanover in 1698, at which Leibnitz, Jablonski, and Molanus were present. The result justified his sagacity. A scheme for ecclesiastical union or co-operation, in order to be successful, should be able to assume the spirit of hearty and supreme devotion to religion on the part of those who are to be united. The progress of the great spiritual commonwealth, and not the political arrangements of nations, must be its ruling principle.

The general doctrine of toleration, and the laws which regulate the attainment of truth, were frequently the subjects of incidental speculation on the part of Leibnitz, connected as they are with ecclesiastical unity, and, indeed, with the discussion of whatever relates to the social or individual good estate of man. His disposition was naturally tolerant. In his works we have repeated glimpses of those doctrines which have now become much more widely diffused through society, and which were so admirably enforced by his great contemporary Locke. He appreciates with cordiality the value of the prevalence of mild sentiments, and an unsectarian spirit, as means for the discovery and diffusion of truth — habits of mind, which, we are glad to believe, are becoming now of more generally recognised moral obligation.

Even the speculative discussion of this class of subjects has not yet been exhausted. There is room for an investigation into those general relations among men considered as members of society, in regard to individual belief or opinion, which the moral law demands, and which reason and experience approve, as best fitted to secure the most extensive diffusion of truth; and in subordination to which all special social organization, civil and ecclesiastical, ought to be regulated. The full solution of this great problem

is still among those left to exercise the minds of the men of this or of some future age.

Throughout the forty years of his connexion with the Court of Hanover, Leibnitz maintained his literary intercourse with unabated energy. In this period he settled and extended the foundations of the literary republic of Europe. In 1687, he travelled up the Rhine, ransacked the libraries and archives of Bavaria, Bohemia, and Vienna, and promoted his acquaintance with learned men. In 1689, he went to Italy, and gained free access to the Vatican and Barberini libraries. His intercourse with the Jesuits and other religious Orders, was all turned to the account of adding to his stores of learning. After visiting Rome, he travelled through Italy, and returned to Hanover in 1690, only to resume his labours in the Royal library, of which he had been appointed keeper. In 1700, he was the means of founding the famous Berlin Academy of Sciences, meant by him to be a centre of German literary and scientific intercourse and effort. He was unfortunately unsuccessful in his endeavour to establish at Vienna another institute of the same kind, and on a still more comprehensive plan. He was much interested in the civilisation of the rising Russian empire, and had personal conferences on the subject with Peter the Great. He busied himself with the progress of education and missionary exertion in Russia, and also in the German States, where he was anxious that the schools and colleges should be seminaries of Protestant missions.

Amid all his diversified projects, and stupendous literary activity, the metaphysical tendency ever preserved the ascendency in the genius of Leibnitz. His philosophical principles were gradually matured soon after his settlement in Hanover. The doctrine of *Monads* was developed in a succession of publications subsequent to 1680. Some of his most valuable contributions to Philosophy are due to the publication of the celebrated “Essay on Human Understanding,” which appeared in 1690, and at once

attracted his attention. There could be little mutual sympathy between two philosophers so completely antagonist as the author of the "Essay" and himself. Locke despised what he called the "chimeras" of Leibnitz. The Teutonic philosopher accorded to his English contemporary the praise of perspicuity, but proclaimed his utter ignorance of the "demonstrative metaphysics." In 1703, Leibnitz being disengaged, undertook a formal reply to Locke, which he completed in the following year. The death of Locke caused an indefinite postponement of the publication of this work, which did not appear till long after the death of the author. In 1765, it was given to the world by the industrious Raspe. This work, published under the title of "*Nouveaux Essais sur l'Entendement Humain*," is his philosophical masterpiece, and contains the substance of all that has been advanced by him on behalf of his speculative system, against the school of Locke.

The manner of publication adopted by Leibnitz was, for the most part, fragmentary. His "*Système de l'Harmonie Préétablie*" is developed in various small treatises. There is, however, one great work, which is more popular and practical in its style, and therefore more generally known than almost any of his other writings, the preparation of which occupied much part of many years in his life. We refer to the *Théodicée* — a book which holds a front rank in the very small class of works specially conversant with the philosophy of religion. The design of the *Théodicée* is to reconcile the existence and continuance of evil in the universe with the character of God — to remove the difficulty that has been raised in all ages, and in all religions, and that may be reckoned the fundamental metaphysical problem of the Christian philosophy. It has already been indicated that the thoughts of Leibnitz were directed to these subjects from the time of his decided intellectual development. In 1671 he wrote a tract on Free Will and Predestination. The negotiations about Church union perhaps led him to take a greater interest in these speculations, in as far as the circulation of

doctrines fitted to harmonize with the dark phenomena of the moral world the biblical view of the character of God, might facilitate the peace of the Church. The avowed purpose of the *Théodicée* is to refute the sceptical principle of Bayle, who denied the consistency of faith and reason, and thus laid a foundation for universal doubt. The public appearance of the book in 1710, produced a profound sensation. It was received with applause by most of the continental universities, but the prevalence of Locke's Philosophy in England disposed the public mind in this country to receive it with distaste.

The current of speculation, in the mind of Leibnitz, continued to flow during the later years of the philosopher's life. In 1714, he drew up a scheme of his Philosophy for the use of Prince Eugene of Savoy, (*La monadologie*.) This period of his life was also signalized by his correspondence with Des Bosses. The close of 1715 is memorable as the commencement of a still more interesting correspondence. In a letter to the Princess of Wales, he assailed the philosophical and religious principles of the school of Locke and Newton. This called forth Samuel Clarke in their defence. The replies of Leibnitz, and the rejoinders of Clarke contain as large an amount of curious speculation as any work of modern times. The manner of God's relation to the universe — the nature of miracles — the laws of the divine and human will — the ideas of space and time — and the character and limits of the material world, are among the stores of this magazine of speculative discussion. The controversy was continued with increasing zeal on both sides. Inferior in power of generalization and originality to his antagonist, the intellect of Clarke was possessed of an acuteness and logical force which rendered him one of the most skilful of philosophical disputants, and demanded a full display of the comprehensiveness and grandeur of mind of his German rival.

But that mighty spirit was now to close his connexion with this mysterious scene of existence. Leibnitz had suffered from occasional illness during several preceding years. These attacks, however, passed away, and the philosopher resumed his speculations with renewed energy. In November 1716, when he had to prepare his reply to Clarke's fifth letter, his illness returned with great violence. We have no distinct record indicating that the moral sensibilities of the Philosopher were rightly alive to the decisive nature of the awful change. His seventy years are ended, and the lightning seems lost among dark clouds. During the last day of his life, we are told he was busied in conversation with his physician on the nature of his disease, and on the doctrines of alchymy. Towards evening his servant asked him if he would receive the Eucharist. "Let me alone," said he; "I have done ill to no one. I have nothing to confess. All must die." He raised himself on the bed and tried to write. The darkness of death was gathering around him. He found himself unable to read what he had written. He tore the paper, and lying down, covered his face with his hands. A few minutes after nine o'clock on the evening of the 14th November 1716, Leibnitz ceased to breathe. It is affecting to the imagination to contemplate a human spirit, whose course of thought throughout life was unsurpassed for power of speculation, and daring range of mind among the higher objects of knowledge, and who, at the very period of its departure, was in the depths of a controversy about the mysteries of the supersensible world, — thus summoned into that world, to become conversant in his final relations with the Being who had intrusted him with mental power, and whose nature and attributes had so often tasked his speculative energies.

The effect, upon many minds, of the record of the life of this Philosopher, may be, perhaps, akin to a confused amazement at the spectacle of continued mental exercises so unparalleled in kind and variety. Yet a vague impression of this sort ought not to be the predominant one. A

grand unity pervades the seeming confusion in which this man's life seems enveloped. A reigning idea which diffuses a community of principle through the whole cycle of his works, we have traced back in the earliest operations of his reflecting powers. Conversant through his life with those mysteries in proof of which no reason can be given, and with real or seeming demonstrations founded on these "first principles," we find in Leibnitz the type or model of the speculative metaphysician. The present seems a fit occasion for bestowing the notice of a short discussion on this suggested subject, which is connected with an important contribution made by Leibnitz to philosophy. The consideration of it may, besides, make us advantageously familiar with some of the properties of that atmosphere in which has been gathered the cloud that has darkened subsequent German speculations, and rendered metaphysical science, in one aspect of it, retrograde in that country.

Des Cartes, the reviver and reformer of Speculative Philosophy in modern times, commenced his philosophical career with the practice of universal doubt, as the means of reaching the elements of knowledge. Thus set loose in the microcosm of thought, he found the consciousness of self-existence inseparable from the act of thinking. "Cogito, ergo sum" was accordingly his first principle. Involved in the rudiments of self-consciousness, he found the idea of an all-perfect Being, whose attributes require the certainty of all that is *clearly* and *distinctly* recognised by us. With the help of these assumptions, he thought himself prepared to defend knowledge against the assaults of scepticism. But the supposed foundation was too narrow. The tests proposed for its extension were too vague. The effects soon became apparent. The disciples and admirers of Des Cartes maintained doctrines the most various. Malebranche could not, without the infallible Church, retain an external world. The Egoists, whose existence as a sect is, however, somewhat problematical, having declared their inability

to rise beyond the first axiom of their master, rested there amid the fluctuations of a merely subjective universe. Spinoza, unable to defend, by reasoning, our faith in finite substances, absorbed mind and matter in one all-pervading Existence. Des Cartes had, in truth, proposed to the thinking world an insoluble problem, when he sought to reach the extreme theory of knowledge, self-consciousness alone being given.

Leibnitz saw the insufficiency of the Cartesian principle. He longed to solve the hitherto unsolved difficulty of a First Philosophy. Des Cartes, by directing him to the mind itself, through which we reflect, had, for the first time, clearly shown the *quarter* in which, those results of which he was in quest are to be found. The maxim of the school of Locke was "*nihil est in intellectu nisi quod prius in sensu*." The famous addition, "*nisi intellectus ipse*" expresses the distinctive peculiarity of Leibnitz. But how is the "*intellectus ipse*" to be distinguished from the "*quod prius in sensu?*" The discovery of a *test* for marking this distinction, is an important addition made by him to the common stock of philosophical principle. He has expressed its nature, among other places, in a letter to Bieling, in which, speaking of Locke, he asserts that he has "no idea of the demonstrative metaphysics. Could he have made the distinction between *necessary truth*, which we obtain by intuition, and those other truths which we reach by experience, he would have found that the senses teach us only what *takes* place, not what *must* take place." All those ideas which we are compelled to think, accordingly, belong to the very structure of the soul itself, and are to be included as articles of our original Faith. The critical philosophy of Kant is an attempt, by the application of this principle, to collect the several truths with which the soul is at first furnished, and to view them in their relation to the added facts of experience.

Philosophy has ever been a struggle between the spirit of doubt and the spirit of dogmatism — of which the one declines to admit as true any

conclusion that is not the result of logical deduction, and the other assumes, in whole or in part, the principles which the sceptic assails. Men in all ages have been oscillating between these extremes. The many, in whom the love of order and simplicity naturally predominates, and who are likely to be aiming at a philosophy in which every assumption and conclusion is capable of being conceived and explained by the understanding, may find, in the singularly acute " Treatise" of Hume, the results of such shallow metaphysics. A more profound view of what is revealed to reflection, finds an infinity of things which the understanding cannot solve, and which, while not contrary to sense, are yet above sense. A love for the mystic obscurity in which this principle involves the higher truths of knowledge, may confine an enthusiastic thinker exclusively within that region of abstraction, and conduct him altogether away from sense and experience, till, lost in the supersensible forms of thought, he resolves the actual into the ideal; and thence, in a different direction, reaches practically the very scepticism from which his previous course was a seeming divergence. Faith is, on the one side, lost in the dark abyss of doubt: on the other, it evaporates in the sunny haze of the empyrean of transcendentalism. In either case, a pretended philosophy, instead of guiding the perplexed labourers who are pressing on with their work below, only adds to the fogs which already darken their atmosphere.

It is, notwithstanding, evident that the perfect philosophy must recognise and include a body of first principles, resting on faith, by which all knowledge of things divine and human must be regulated. As, in the material world, the lever needs a *fulcrum* before it can work, so, in the world of thought, these *mysteries* are the indispensable fulcrum of intellectual exertion. To obtain a refuge from doubt, and a sure and rational foundation on which knowledge and action may be based, must always be the aim of the higher philosophy. The tendency of men of earnestness and

reflection in this direction, depends on the maxim involved in the very act of reflecting; for the root of reflex thinking is the consciousness which we feel, that in rigorous search for truth or decisive controversy, we are called to labour for the attainment of an ultimate principle which shall either itself explain that about which we speculate, or else supply a self-evident reason that to us it is inexplicable. Reason would be interminable, if it did not find its ultimate limit in truths which it cannot prove. Every principle must be either resolvable by the understanding, or must rest on faith; and as every conceivable question may be thus carried down to faith, all knowledge runs into mystery. An adjustment of *the fact* of this realm of mystery, from which no effort can disconnect us, has ever been the profound difficulty with men of contemplative minds, and one which the labours of thinking men of all ages have advanced only a very few steps towards a solution. Its mal-adjustment in the philosophical system has already wrought havoc with the highest and most solemn interests of men. Along the borders of this shaded land, have arisen the *miasmata* of the schools of Elis and Alexandria, of Spinoza and the new German philosophy, and of eastern mysticism. Hitherto, Scottish thinkers, with a very few exceptions, have tried practically to substitute an analysis of mental phenomena, in place of the real difficulties of metaphysical speculation. But abstract reflection, if legitimately pursued, must in the end place us in contact with these difficulties. If in some minds the floodgates of universal doubt are thus opened, this is a discipline we cannot avoid. Mysteries are needed as means to the attainment of knowledge. They are, moreover, suggested to the soul by all its most prominent objects of thought — by the starry heavens — by the infinite space in which we and they are included — by the awful eternity through which we are passing — by the consciousness of our own existence — by the revelation of Him “in whom we live and move and have our being” — by the sublime realities of a moral law, and a responsible

because personal agency — and by the dark shades of guilt in which a portion, at least, of that created personal agency is involved. Of mysteries like these we cannot rid ourselves. They rise in a thousand forms, and in them all knowledge merges. The question here reverts to deep-thinking minds, How are we to deal with them, and what place is to be assigned to them? We may still "report deficient" the *Philosophia Prima* of Bacon; but with the instructive lesson of the extravagancies of Continental speculation before our eyes, and the sober Christian discipline of the Scottish mind for an additional sedative, we may yet become better prepared for the calm discussion and settlement (as far as man can settle them) of these lofty questions, and for an encounter with the hydra of a perverted speculation, which already shews signs of being within our borders, in the distorted theology of would-be metaphysical theologians, and in the atheism and socialism of our corrupted masses.

We fear we may not have succeeded in rendering very intelligible, and far less in rendering attractive, the nature and scope of the most comprehensive question in philosophy. After any attempted statement of it, the consequent experience of the insufficiency of the words of ordinary language for these refined purposes, must invest with interest the splendid project by Leibnitz himself of a universal language, of which the alphabet should indicate the few original ideas with which all the rest of our knowledge is connected; while overlooking, perhaps, the wide difference of the matter of metaphysical and mathematical science, he held that out of these simple characters formulas might be constructed, expressive of the various relations between thoughts, and that through them inferences might be deduced, with the same freedom from error, as by the processes of geometry and algebra. But we must leave for the mind of the reflecting reader the entire subject, so imperfectly touched upon in the preceding paragraphs, and return to the books before us.

The philosophical works of Leibnitz are, in bulk, only a small part of the literary productions of a life devoted to almost the whole sphere of possible knowledge. Professor Erdmann has rendered good service to the thinking world by his edition (the most valuable of those referred to at the commencement of this Essay) of this class of the writings of the father of German speculation. While Leibnitz could on no subject write unphilosophically, yet there are sections of his works which may be extracted and combined for publication as more exclusively and profoundly philosophical, indicating not ripples, extended widely, perhaps, over the surface of thought, but the ocean-swell of an agitation that is far below. This department of his writings is scattered, without much attention to order, through the voluminous publication of Dutens, and is partly contained in the rare edition of his posthumous philosophical works by Raspe. Accordingly, while the life of Leibnitz is an epoch in the history of speculation, his speculative writings have been seldom and superficially studied. Besides the materials collected in former editions, Professor Erdmann has enriched his republication with no fewer than twenty-three original documents of Leibnitz, not before published, and which this able and industrious editor has recovered, during an active search in 1836, among the accumulation of manuscripts in the Royal Library of Hanover. Most of these added works relate to that theme, on the subject of which we have already alluded to as the central one of the intellectual life of Leibnitz. It increases the convenience of this edition, that the several works which it includes, 101 in number, have been arranged, as nearly as possible, in the order in which they were written. In this extensive collection, we are glad to recognise the *Nouveaux Essais* and the *Théodicée*.

It is not easy to give even a brief exposition of the very miscellaneous contents of these works. The system and manner of thinking of Leibnitz, is to be gathered from his philosophical works studied collectively, rather than

from any separate publication. These collected writings bear throughout one very marked characteristic of inventive genius; for they are crowded with richly suggestive germs of thought, cast forth often in disorder, as it were with intent to exercise the generalizing powers of others. From out of this stimulating variety, there may, however, be extracted two or three more prominent ideas, united, as far as possible, by demonstration, with his assumed first principles; for the main purpose of this metaphysician was to give to philosophy a mathematical strictness and certainty, and to reconcile its doctrines with those of theology. The universe is contemplated by him in the threefold relation of — 1. Its *elements;* 2. Their *manner of connexion;* and, 3. The *end* of their combination. The doctrine of elements, he calls *monadologie*. The mutual relations of these elements, he held to be developed in a *pre-established harmony*. The final end of creation, he represented as an optimism. Let us accompany him at a distance, as he is constructing this system of *a priori* universal philosophy, in order to have before us a specimen of a class of systems, foreign, indeed, to Britain, but which may be compared with the doctrines of the Eleatics, the Alexandrians, or Spinoza, in respect of its boldness and comprehension.

Through experience, Leibnitz finds himself surrounded by compound or material bodies of amazing variety. This implies the existence of elements, of which these compounds are the results, and the nature of these elements is to be ascertained according to the laws of thought. An application of the principle of the Sufficient Reason, demonstrates that matter can consist neither of parts which are infinitely divisible, nor of atoms possessed of figure and extension. Its elements must, therefore, be simple, unextended forces, or *Monads*, in which we obtain the *a priori* idea of substance. The individuality of these monads must consist in the different series of internal changes through which each one passes in the course of its existence. In these series, each successive change is termed a Perception, and every

monad is a living mirror, giving forth, after its own fashion, a picture of the universe, which is thus one vast collection of spiritual forces. These necessary elements of all concrete existence cannot all be reduced to one class or order, for they are distinguished by different degrees of perception and active power. Some are destitute of conscious perception, and these are the elements of which the material world is the result. Then there is the animating principle of the lower animals. There are also the self-conscious souls of men, containing in themselves the fountains of necessary truth. And these three classes of created forces or substances must have a sufficient reason for their existence. There cannot be an infinite series of contingents, and, if there could, the final reason even of such an infinite series could be found only in a necessary substance. Creation must thus involve the existence of One Supreme infinite, the *monas monadum*, from whom all that is finite has been derived, and in whose existence it finds its complete explanation. This Supreme Substance is God. He is the fountain of all reality. The attributes of the created monads, as far as they are perfect, result from the perfection of God; as far as they are imperfect, from the necessary imperfection of the creature.

Having in these conclusions, as he conceived, demonstratively refunded concrete being into its elements, and related all created elements to the One uncreated and supreme, Leibnitz would next find the mutual relations of the several elementary forces of creation. Although the monads have neither figure nor extension in themselves, their co-existence and relations sufficiently account for the phenomena of extension, duration, and body. Space and Time have thus merely an ideal and relative existence. They result from the relation of monads, considered as co-existing or in succession; and are simply modes in which we regard the objects of our experience. Further, the elements of creation being absolutely destitute of parts and extension, cannot mutually influence one another. Inter-causation

is thus excluded from the real universe, and is confined to the phenomenal, which is governed by mechanical law. Yet the universe is ideally related in the mind of God, and of each creature, in proportion as his ideas approximate to the Divine. God, “in the beginning,” launched the elements into being, having resolved for each one a determinate history throughout eternity, and a history which should harmonize with that of every other. This mutual relation is beautifully illustrated, when we are told that from the given state of any monad at any time, the Eternal Geometer can find the state of the universe past, present, and to come. In the attributes of the Uncreated and Supreme, is to be found the sufficient reason for a Pre-established Harmony in all that He has made. This explains the nature of the changes of creation. The apparent action of finite monads upon each other, is really the result of that original harmonious arrangement of God, in virtue of which He secures, without fail, those ends which He contemplated when the universe issued from his hands. The phenomena attendant on that fruitful theme of philosophical disputation, the union of soul and body, — of the self-conscious monad and the related monads of an inferior order, — are counted capable of explanation on the same general principle. The successive changes of the soul must exactly tally with those of the body; yet without any mutual action. They are related as two clocks, of which the one points to the hour exactly as the other strikes; or as separate parts of the same clock, — for Leibnitz likens the whole universe to a timepiece which was wound up in the act of creation, and which thenceforward pursues its own movements harmoniously for ever. Mind and matter — the realm of final causes, and the realm of efficient causes — are thus in necessary harmony. And a like harmony must obtain between reason and religious faith — the kingdom of nature, and the city of God.

This last harmony links the theological with the merely philosophical part of the system of Leibnitz; and introduces us to his philosophy of

religion. A question may be asked, — If the universe — moral as well as physical — is a self-regulating machine, is not the Creator seemingly excluded from the government of His creation; and, if not thus excluded, how is He related to the sin and misery which it contains? That the apparent manner of His relations to the creation should be what it is, results, he thinks, from our relative knowledge, which can never rise superior to the condition of time. In reality, this pre-established harmony is a revelation of the Divine perfection in a scheme of Optimism. Every possible universe was, from eternity, conceived in the mind of God. One of these only can be translated from possible into actual existence, and that one must be the best. There is, indeed, included in it moral and natural evil, — the latter the harmonious consequent of the former, and a reaction against it. But moral evil cannot be separated from the best of possible universes, and the will of God is not the fountain of necessary truths. The mystery of sin is not to be explained by the resolution of evil into good, for sin is essentially evil. But sin is necessarily involved in the *idea* of this best of possible universes, which, notwithstanding its evil, it is better to translate out of the possible into the actual, than to have no universe at all. Thus, the created universe must be the harmony of one great Theocracy, expressive of the attributes of the one Perfect Being. From His eternal throne, its several streams of elementary existence must have taken their rise. They have flowed, and they must continue to flow, in the courses into which he sent them in the beginning; and, notwithstanding the dark shades in which so many of them are enveloped, they are recognised by His Omniscience as the only possible and therefore most glorious illustration, by creation, of the pure fountain whence they have originated.

If illusory, these are, at least, splendid speculations. There are two modes of thus rising beyond the limits of the imagination in a philosophy of the universe. We may follow the course of the modern astronomy; or, we may

meditate on the facts of metaphysics and speculative theology. He who studies the one, gazes on the starry heavens and ranges in thought over the distant parts of material creation, till, lost in what he observes, his astronomy seems merged in idealism. The votary of speculation, on the other hand, taking in the spiritual as well as the material world, contemplates the Human and the Divine; and with faculties fitted to judge only of successive and contemporaneous nature, meets the mysteries of an objective world, of personality and free-will, and of the Divine existence, and seems, also, lost in that world of ideas, where physical and metaphysical science thus appear to converge.

By these assumed demonstrations, of which we have given a very vague outline, Leibnitz hoped to deliver metaphysical science from future errors and controversies, and to lead the way to a universal peace, in which Reason should be harmonized with Religion. Whatever we may say of the truth or falsehood of the doctrines to which he attained, we cannot withhold our homage of admiration when we reflect on such an amount of speculative genius in busy operation throughout a long life, — on the amazing sweep of the abstract conceptions which that genius has employed, — on that strong logical faith in the omnipotence of deduction, — on the richly suggestive ideas which this mighty thinker has contributed to philosophy, — and, on the unity of a system which sublimely designs to harmonize the spiritual with the sensible world.

Leibnitz formed scholars, rather than a school. His system is essentially an eclectic one, and the whole tendency of his mind was opposed to merely national and sectarian distinctions, against which the extreme comprehensiveness of his genius gave him an instinctive repugnance, while his own fruitful mind rendered the most obscure system suggestive, and therefore worthy of being regarded with favourable indulgence. His sanguine spirit delights to discern a progress in the retrospect of the whole

history of philosophy. In the early eastern systems, he finds noble ideas of God and the universe. In Greece he sees these reduced to a dialectic form. The early fathers appear to him to cast aside the corruptions of the Greek philosophy, while the schoolmen employ it in the service of Christianity. In modern times philosophy has become more free and ardent, and better directed than ever, and would, he thinks, be more successful than it has been, but for the evil spirit of sectarianism.

"There is only one permitted sect of all," says Leibnitz, "the sect of searchers after truth. The Aristotelians and Cartesians fail, not for want of talent, but because of their sectarianism. The imagination, which has been long under the spell of a single melody, cannot readily listen to another. He who has for years travelled the same beaten track, becomes unobservant of the surrounding scenes. Just so, those who have formed a habit of subordination to a single mind, are disqualified for the hopeful exercise of their own."

Such was the spirit of Leibnitz; yet, probably the prevailing impression on the minds of any who have studied his writings, is a feeling of the remarkable contrast between the splendid intellectual exertions and enormous learning of this philosopher (combined as these are in him to an unprecedented degree), and the small positive contributions he has made to the register of permanently recognised truths. The vastness of his general principles occasions a corresponding vagueness in the rules for their application. They extend so widely as to comprehend only a few of the qualities of each of the objects that they include. The fact is, they reached too far to become at once familiar to the minds of men. The real spirit of the Leibnitzian philosophy slumbered for more than half a century, during which his nominal scholars under Wolff were starving on the subtleties of a severe yet profitless dialectic, and were evincing that dislike for really vigorous thought which is indicated by the pedantry of an empty imposing

philosophical nomenclature. In this period, the earlier Teutonic metaphysics perished as a System, to revive as a Spirit in the later German philosophy, and then to develop fully that germ, in the earlier system, of a perverted speculative idealism, which has shewn itself incompetent to realize in its expositions that positive adjustment for mysteries to which it aspires.

It is impossible here to plunge into the depths to which a formal criticism of this philosophy would conduct us, implying, as such a criticism would do, a full determination of the province of *a priori* reasoning in its relation to the facts of experience. The practised eye must have observed a connexion with many earlier and later schemes of a kindred description, even in the rough outline of it we have now given.

The attentive student, of the sketch which we have attempted, has perhaps already recognised in the central principle of this system of universal philosophy, a relation to one of the cardinal questions of metaphysical science, and a curious coincidence in the history of philosophy. By his subtle process of reasoning, Leibnitz virtually excludes the possibility of an external world. The last result of his analysis is a created aggregate of unextended spiritual forces, of various orders, and of which the mutual relations, as collocated in bodies, originate the phenomena of the visible creation.

While the author of the *Monadologie* was in this manner resolving all creation into immaterial elements, a philosopher of another country, and of a different school, was approaching, perhaps more consciously, to a similar conclusion by a different course. Trained in the doctrines of Bacon and Locke, but receiving them into a soul that delighted to hold converse with Plato, and ignorant of the high questions agitated in Germany by his contemporary, he deduced from the principles of the English philosophy a system of idealism, which, besides its seductions for the imagination, is urged in a spirit and for a purpose that must ever render venerable among

Christians, as well as illustrious among metaphysicians, the name of Berkeley, Bishop of Cloyne. His well-known “Dialogues” are, to many minds, perhaps the most attractive display of metaphysical doctrine which the English language contains. This philosopher is, moreover, worthy of notice for more than even his elegant fancy, and refined discussion, and graceful diction. The scenes and music of material nature, which have infused so much poetry into his writings, and which he would connect with something less gross than the cumbrous apparatus of an external world, are all regarded by Berkeley as direct manifestations of God. With this Christian philosopher, visible nature is not an aggregate of merely unconscious substances — the refuge of atheism and materialism — the veil by which God is concealed from man, and then banished from his thoughts. In the seeming solitude of idealism, he finds himself in the immediate presence of the “Father of Spirits,” in whom we thus literally “live, and move, and have our being.”

Thus, at the commencement of the eighteenth century, there were two philosophers, representing the two opposed schools of philosophy, whose speculations conducted them to immaterialism. The “demonstrative metaphysic” of Leibnitz has parted with body and extension before it has resolved nature into its elements. The experimental philosophy of Berkeley fails to extract from the phenomena of perception the evidence of a substance different in kind from the self-conscious spirit which perceives them.

Since, as well as before the epoch of Leibnitz and Berkeley, that vast group of phenomena commonly designated material, and which are so nearly connected with life in this “middle state,” has occasioned much speculation. The defence of the doctrine of the essential distinction of mind and matter, has hitherto been a characteristic of the national philosophy of Scotland. That philosophy has to encounter the opposition of three contrary

idealistic hypotheses, according to one of which all created existence is resolved, with Leibnitz, into spiritual substances of different orders, and material phenomena are regarded as merely resulting from these immaterial elements — according to a second, the material world is conceived as a series of ideas produced immediately and in regular order by God in the minds of men — according to a third, as a group of the phenomena of our own minds, regulated by an unknown principle. The adjustment of the long-agitated controversy about the nature of Matter is of practical importance, chiefly as it is connected with the refutation of scepticism. There surely remains room for a better-defined settlement of the actual evidence of consciousness with regard to a subject which, in all ages, has tended to excite speculation, and which, since the time of Berkeley, has been regarded by acute minds as, at least, an "open question" in metaphysical science.

The most important service, however, which its author hoped to render by his System of Monads, relates to the refutation of Pantheism. The *Monadologie*, with the consequent doctrines, is essentially an effort to indicate the metaphysical and moral relations of the Divine Being with the universe. Antagonist to the Cartesian hypothesis of occasional causes, the doctrine of a pre-established harmony has been accused of tending to an atheistic separation of the world from God, while the rival system has been counted open to the charge of an identification of the creature and the Creator, of which there are signs in the system of Malebranche, and which was fully developed in the Ethics of Spinoza. We are unable to undertake an elaborate discussion of a subject so profound and complicated as the one suggested by these speculations — a discussion which requires a previous settlement of the limits and canons of metaphysical reasoning — and we would conclude this Essay with some allusion to that awful frontier land, where religion becomes blended with the higher philosophy, and where

objects have been found fitted to attract educated and uneducated minds in all ages of the world.

Leibnitz, as we have seen, was led by his love of speculation, and also by a desire to repel the sceptical objections of Bayle, to consider the much-vexed question of the origin of evil. It might be made evident, if we are not mistaken, that, in his attempt to reconcile the dismal phenomena of our own actual experience with what is discovered from other sources of the character of God, we have a fit illustration of the inapplicability, for purposes of useful effect, of principles so extremely general as those with which he was accustomed to deal. We frequently observe also an indistinct apprehension, on the part of the philosopher, of the line by which, in these matters, positive is separated from negative knowledge.

There must be mysteries in a science like theology, which includes among its principal objects, the nature and attributes of God, as related to a class of responsible created agents. An important step of progress has been gained, when what is incognizable is treated as an acknowledged mystery. Much needs still to be done to spread the spirit, and secure the right application of this principle. The region of a new science, or at least of a wider and better application of metaphysical and also of logical science, seems to open before us, when we contemplate in their connexion the series of events which pervade natural and supernatural theology, regarded as the science of the mutual relations of God and man.

The primary truth of theology demands the exercise of philosophical faith. The finite mind cannot grasp the full conception of the co-existence of a responsible creature with the infinite Creator. The existence of a moral creation is a fact which man cannot explain. He finds in himself the relics of a Law impressed on him when he was created “in the image of God,” which tells of duty and demands obedience; and this gives evidence that man was created to be governed by, and so was taken into a moral relation with, a

personal God. He finds himself a dependent and yet a moral agent, responsible for his manner of acting towards Him from whom he received the power to act. This combination of freedom with derived and dependent agency, includes something beyond the limits of the human faculties. An anchor is needed, by which the understanding may be kept back, on the one hand, from a Pantheistic absorption of the moral creation in the Creator, and, on the other, from suffering the universe to be cast adrift on the dreary ocean of Atheism; and it is found in the faith which believes what it can neither question nor fully comprehend.

The evolution of the theological system is a further evolution of the mystery into which its first principle retires. As the understanding cannot embrace a reconciliation of the infinity of the divine attributes with the creation of beings free to act, and therefore responsible, neither can it devise a scheme for harmonizing with these attributes the dark history of a portion of that created agency. We find that each member of our own race is born into the world "alienated" from God, and we are told of another race that has fallen, without hope of recovery, into the same awful habit of ungodliness. The continued existence of moral creatures in the universe has thus added another inexplicable phenomenon to the mystery of their original creation. Sin has appeared. Responsible creatures have become rebels against the law of Him from whom their responsibility was derived. The stream which, in the creating act, was seen to issue from impenetrable recesses, here resumes its subterranean channel, and when it reappears, has become strangely altered.

There is a third evolution of the mystery which pervades theology. God Himself has spoken to us of an extraordinary plan of restoration, of which the operation becomes apparent to us when the "alienated" are "reconciled." The created agent had carried his responsibility through the course of the original estrangement, and his responsibility is continued through the

subsequent course of restoration. Yet the subjective process of estrangement commences with his birth, and the subjective process of reunion is conducted by the present living agency of the Holy Spirit. The phenomena of restoration in the spiritual world, displayed in the Church of God, thus, like the two preceding classes of related phenomena, rise out of a region into which the eye of the human understanding cannot penetrate.

A series of strange facts is unfolded in the history of this corner of the universe. Creation, sin, and salvation — the unfallen, the fallen, and the restored moral creature — are revealed to us in events which we may know, while each seems to emerge directly from an abyss whose depths we cannot fathom. Their appearance has been the signal for those controversies of theologians which have been carried on, and those battles of faith with scepticism which have been fought, for almost six thousand years. In the revealed fact of creation, we find the germ of the questions of Pantheism and Free-will. The existence of sin has suggested the hypotheses of Manichaeism and Optimism. The phenomena of restoration are connected with the doctrines of Election and Grace, and their proposed modifications, and with the revealed prospects of the moral creation throughout eternity.

It is ethically important that the mind should become familiar with the general character of that associated group of theological truths which demands the exercise of philosophical faith, and therefore falls within the range of what has to be considered, and somehow disposed of, in a complete system of metaphysical philosophy. That religion *must* be pervaded by this series of mysteries which we have endeavoured to trace, is a principle of which the cordial reception should moderate our polemical ardour with reference to all in theology that is merely human opinion, and conduct us “as little children” to that *practical* solution of them all, which is opened to the soul that has become “willing to do” the will of God. History, which has to record the signs of the moral disorder of man, bears the record

of other irregularities, and that even in the series of natural phenomena. It gives evidence of the existence of One who died and rose again, and whose miracles, insoluble by the laws of the physical creation, are connected with the laws and harmony of a higher economy. As the grand credentials of a revelation from God, addressed to a fallen race, and which contains an account of the origin and cure of its disorders, sufficient to satisfy and stimulate a reviving conscience, they are fitted to elevate thought, from the world of sense in which they have been manifested, to man and man's prospects in that moral and spiritual world which we here "see through a glass darkly" in the reflection of a reality that is not yet in itself revealed.

Thus has God sufficiently provided us with a practical solution for the mysteries of theology. Conversant, as we ought to be, with what is beyond the limits of sensible experience, and incapable of comprehension by faculties created for comprehending only the events of contemporaneous and successive nature, we may yet learn, through experience itself, that religious faith in the miraculously revealed law of grace finds the needed harmony of what by us is incomprehensible — a harmony in which the conscience does the work that cannot be devolved upon the intellect, and in which the transformation of the character is found a sure path to the sufficient knowledge of the doctrine. The mysteries of nature and reason thus cease to hinder the gradual restoration of the regenerate to the image of God.

The preceding notices and reflections have accumulated so much beyond our expectation, that we must not extend our limits beyond this point, from which we may look at a distance, with awe and profit, upon the host of speculative questions which the writings of Leibnitz are evidently fitted to raise. Our end has been gained, if what we have written leads any to benefit by sympathy with the comprehensive spirit of a famous metaphysician and metaphysical theologian — to refresh and elevate their minds by the

meditative study of his works — and to be warned of the still prevalent illusions which carried him captive, and, seeming to gain strength and courage from the victory, have carried captive the succeeding generations of German speculators. These lessons are needed in an age in which there are signs that the revival of old controversies, and the rise of new ones, — many of them not remotely connected with these illusory habits of thought, — are about to surprise a generation ill fitted to deal with abstract speculation. We love to anticipate a future history of Metaphysics and Theology in this country more encouraging than these omens seem to forebode; and to have disclosed before us in imagination, as one of the characteristics of the succeeding age, an ethically disciplined metaphysical spirit, operating according to the canons of a well-applied Logic, under the increasing light of Biblical science, towards the production of a richly intellectual and yet profoundly scriptural theology, and the attainment, for the Christian religion and the Christian Church, of a position among the forces at work in society, which the human agency charged with their maintenance and propagation is not at liberty to disregard.

Gottfried Wilhelm Leibnitz (1911) by William Ritchie Sorley

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GOTTFRIED WILHELM LEIBNITZ (1646-1716), German philosopher, mathematician and man of affairs, was born on the 1st of July 1646 at Leipzig, where his father was professor of moral philosophy. Though the name Leibniz, Leibnitz or Lubeniecz was originally Slavonic, his ancestors were German, and for three generations had been in the employment of the Saxon government. Young Leibnitz was sent to the Nicolai school at Leipzig, but, from 1652 when his father died, seems to have been for the most part his own teacher. From his father he had acquired a love of historical study. The German books at his command were soon read through, and with the help of two Latin books — the *Thesaurus Chronologicus* of Calvisius and an illustrated edition of Livy — he learned Latin at the age of eight. His father's library was now thrown open to him, to his great joy, with the permission, "Tolle, lege." Before he was twelve he could read Latin easily and had begun Greek; he had also remarkable facility in writing Latin verse. He next turned to the study of logic, attempting already to reform its doctrines, and zealously reading the scholastics and some of the Protestant theologians.

At the age of fifteen, he entered the university of Leipzig as a law student. His first two years were devoted to philosophy under Jakob Thomasius, a Neo-Aristotelian, who is looked upon as having founded the scientific study of the history of philosophy in Germany. It was at this time probably that he first made acquaintance with the modern thinkers who had already revolutionized science and philosophy, Francis Bacon, Cardan and

Campanella, Kepler, Galileo and Descartes; and he began to consider the difference between the old and new ways of regarding nature. He resolved to study mathematics. It was not, however, till the summer of 1663, which he spent at Jena under E. Weigel, that he obtained the instructions of a mathematician of repute; nor was the deeper study of mathematics entered upon till his visit to Paris and acquaintance with Huygens many years later.

The next three years he devoted to legal studies, and in 1666 applied for the degree of doctor of law, with a view to obtaining the post of assessor. Being refused on the ground of his youth he left his native town for ever. The doctor's degree refused him there was at once (November 5, 1666) conferred on him at Altdorf — the university town of the free city of Nuremberg — where his brilliant dissertation procured him the immediate offer of a professor's chair. This, however, he declined, having, as he said, "very different things in view."

Leibnitz, not yet twenty-one years of age, was already the author of several remarkable essays. In his bachelor's dissertation *De principio individui* (1663), he defended the nominalistic doctrine that individuality is constituted by the whole entity or essence of a thing; his arithmetical tract *De complexionibus*, published in an extended form under the title *De arte combinatoria* (1666), is an essay towards his life-long project of a reformed symbolism and method of thought; and besides these there are our juridical essays, including the *Nova methodus docendi discendique juris*, written in the intervals of his journey from Leipzig to Altdorf. This last essay is remarkable, not only for the reconstruction it attempted of the *Corpus Juris*, but as containing the first clear recognition of the importance of the historical method in law. Nuremberg was a centre of the Rosicrucians, and Leibnitz, busying himself with writings of the alchemists, soon gained such a knowledge of their tenets that he was supposed to be one of the secret brotherhood, and was even elected their secretary. A more

important result of his visit to Nuremberg was his acquaintance with Johann Christian von Boyneburg (1622–1672), formerly first minister to the elector of Mainz, and one of the most distinguished German statesmen of the day. By his advice Leibnitz printed his *Nova methodus* in 1667, dedicated it to the elector, and, going to Mainz, presented it to him in person. It was thus that Leibnitz entered the service of the elector of Mainz, at first as an assistant in the revision of the statute-book, afterwards on more important work.

The policy of the elector, which the pen of Leibnitz was now called upon to promote, was to maintain the security of the German empire, threatened on the west by the aggressive power of France, on the east by Turkey and Russia. Thus when in 1669 the crown of Poland became vacant, it fell to Leibnitz to support the claims of the German candidate, which he did in his first political writing, *Specimen demonstrationum politicarum pro rege Polonorum eligendo*, attempting, under the guise of a Catholic Polish nobleman, to show by mathematical demonstration that it was necessary in the interest of Poland that it should have the count palatine of Neuburg as its king. But neither the diplomatic skill of Boyneburg, who had been sent as plenipotentiary to the election at Warsaw, nor the arguments of Leibnitz were successful, and a Polish prince was elected to fill the vacant throne.

A greater danger threatened Germany in the aggressions of Louis XIV. (see France: *History*). Though Holland was in most immediate danger, the seizure of Lorraine in 1670 showed that Germany too was threatened. It was in this year that Leibnitz wrote his *Thoughts on Public Safety*, in which he urged the formation of a new “Rheinbund” for the protection of Germany, and contended that the states of Europe should employ their power, not against one another, but in the conquest of the non-Christian world, in which Egypt, “one of the best situated lands in the world,” would fall to France. The plan thus proposed of averting the threatened attack on

Germany by a French expedition to Egypt was discussed with Boyneburg, and obtained the approval of the elector. French relations with Turkey were at the time so strained as to make a breach imminent, and at the close of 1671, about the time when the war with Holland broke out, Louis himself was approached by a letter from Boyneburg and a short memorial from the pen of Leibnitz, who attempted to show that Holland itself, as a mercantile power trading with the East, might be best attacked through Egypt, while nothing would be easier for France or would more largely increase her power than the conquest of Egypt. On February 12, 1672, a request came from the French secretary of state, Simon Arnauld de Pomponne (1618–1699), that Leibnitz should go to Paris. Louis seems still to have kept the matter in view, but never granted Leibnitz the personal interview he desired, while Pomponne wrote, "I have nothing against the plan of a holy war, but such plans, you know, since the days of St Louis, have ceased to be the fashion." Not yet discouraged, Leibnitz wrote a full account of his project for the king, and a summary of the same evidently intended for Boyneburg. But Boyneburg died in December 1672, before the latter could be sent to him. Nor did the former ever reach its destination. The French quarrel with the Porte was made up, and the plan of a French expedition to Egypt disappeared from practical politics till the time of Napoleon. The history of this scheme, and the reason of Leibnitz's journey to Paris, long remained hidden in the archives of the Hanoverian library. It was on his taking possession of Hanover in 1803 that Napoleon learned, through the *Consilium Aegyptiacum*, that the idea of a French conquest of Egypt had been first put forward by a German philosopher. In the same year there was published in London an account of the *Justa dissertatio* of which the British Government had procured a copy in 1799. But it was only with the appearance of the edition of Leibnitz's works begun by Onno Klopp in 1864 that the full history of the scheme was made known.

Leibnitz had other than political ends in view in his visit to France. It was as the centre of literature and science that Paris chiefly attracted him. Political duties never made him lose sight of his philosophical and scientific interests. At Mainz he was still busied with the question of the relation between the old and new methods in philosophy. In a letter to Jakob Thomasius (1669) he contends that the mechanical explanation of nature by magnitude, figure and motion alone is not inconsistent with the doctrines of Aristotle's *Physics*, in which he finds more truth than in the *Meditations* of Descartes. Yet these qualities of bodies, he argues in 1668 (in an essay published without his knowledge under the title *Confessio naturae contra atheistas*), require an incorporeal principle, or God, for their ultimate explanation. He also wrote at this time a defence of the doctrine of the Trinity against Wissowatius (1669), and an essay on philosophic style, introductory to an edition of the *Antibarbarus* of Nizolius (1670). Clearness and distinctness alone, he says, are what makes a philosophic style, and no language is better suited for this popular exposition than the German. In 1671 he issued a *Hypothesis physica nova*, in which, agreeing with Descartes that corporeal phenomena should be explained from motion, he carried out the mechanical explanation of nature by contending that the original of this motion is a fine aether, similar to light, or rather constituting it, which, penetrating all bodies in the direction of the earth's axis, produces the phenomena of gravity, elasticity, &c. The first part of the essay, on concrete motion, was dedicated to the Royal Society of London, the second, on abstract motion, to the French Academy.

At Paris Leibnitz met with Arnauld, Malebranche and, more important still, with Christian Huygens. This was pre-eminently the period of his mathematical and physical activity. Before leaving Mainz he was able to announce an imposing list of discoveries, and plans for discoveries, arrived at by means of his new logical art, in natural philosophy, mathematics,

mechanics, optics, hydrostatics, pneumatics and nautical science, not to speak of new ideas in law, theology and politics. Chief among these discoveries was that of a calculating machine for performing more complicated operations than that of Pascal — multiplying, dividing and extracting roots, as well as adding and subtracting. This machine was exhibited to the Academy of Paris and to the Royal Society of London, and Leibnitz was elected a fellow of the latter society in April 1673. In January of this year he had gone to London as an attaché on a political mission from the elector of Mainz, returning in March to Paris, and while in London had become personally acquainted with Oldenburg, the secretary of the Royal Society, with whom he had already corresponded, with Boyle the chemist and Pell the mathematician. It is from this period that we must date the impulse that directed him anew to mathematics. By Pell he had been referred to Mercator's *Logarithmotechnica* as already containing some numerical observations which Leibnitz had thought original on his own part; and, on his return to Paris, he devoted himself to the study of higher geometry under Huygens, entering almost at once upon the series of investigations which culminated in his discovery of the differential and integral calculus (see Infinitesimal Calculus).

Shortly after his return to Paris in 1673, Leibnitz ceased to be in the Mainz service any more than in name, but in the same year entered the employment of Duke John Frederick of Brunswick-Lüneburg, with whom he had corresponded for some time. In 1676 he removed at the duke's request to Hanover, travelling thither by way of London and Amsterdam. At Amsterdam he saw and conversed with Spinoza, and carried away with him extracts from the latter's unpublished *Ethica*.

For the next forty years, and under three successive princes, Leibnitz was in the service of the Brunswick family, and his headquarters were at Hanover, where he had charge of the ducal library. Leibnitz thus passed into

a political atmosphere formed by the dynastic aims of the typical German state (see Hanover; Brunswick). He supported the claim of Hanover to appoint an ambassador at the congress of Nimeguen (1676) to defend the establishment of primogeniture in the Lüneburg branch of the Brunswick family; and, when the proposal was made to raise the duke of Hanover to the electorate, he had to show that this did not interfere with the rights of the duke of Württemberg. In 1692 the duke of Hanover was made elector. Before, and with a view to this, Leibnitz had been employed by him to write the history of the Brunswick-Lüneburg family, and, to collect material for his history, had undertaken a journey through Germany and Italy in 1687–1690, visiting and examining the records in Marburg, Frankfort-on-the-Main, Munich, Vienna (where he remained nine months), Venice, Modena and Rome. At Rome he was offered the custodianship of the Vatican library on condition of his joining the Catholic Church.

About this time, too, his thoughts and energies were partly taken up with the scheme for the reunion of the Catholic and Protestant Churches. At Mainz he had joined in an attempt made by the elector and Boyneburg to bring about a reconciliation, and now, chiefly through the energy and skill of the Catholic Royas de Spinola, and from the spirit of moderation which prevailed among the theologians he met with at Hanover in 1683, it almost seemed as if some agreement might be arrived at. In 1686 Leibnitz wrote his *Systema theologicum*, in which he strove to find common ground for Protestants and Catholics in the details of their creeds. But the English revolution of 1688 interfered with the scheme in Hanover, and it was soon found that the religious difficulties were greater than had at one time appeared. In the letters to Leibnitz from Bossuet, the landgrave of Hessen-Rheinfels, and Madame de Brinon, the aim is obviously to make converts to Catholicism, not to arrive at a compromise with Protestantism, and when it was found that Leibnitz refused to be converted the correspondence ceased.

A further scheme of church union in which Leibnitz was engaged, that between the Reformed and Lutheran Churches, met with no better success.

Returning from Italy in 1690, Leibnitz was appointed librarian at Wolfenbüttel by Duke Anton of Brunswick-Wolfenbüttel. Some years afterwards began his connexion with Berlin through his friendship with the electress Sophie Charlotte of Brandenburg and her mother the princess Sophie of Hanover. He was invited to Berlin in 1700, and on the 11th July of that year the academy (Akademie der Wissenschaften) he had planned was founded, with himself as its president for life. In the same year he was made a privy councillor of justice by the elector of Brandenburg. Four years before he had received a like honour from the elector of Hanover, and twelve years afterwards the same distinction was conferred upon him by Peter the Great, to whom he gave a plan for an academy at St Petersburg, carried out after the czar's death. After the death of his royal pupil in 1705 his visits to Berlin became less frequent and less welcome, and in 1711 he was there for the last time. In the following year he undertook his fifth and last journey to Vienna, where he stayed till 1714. An attempt to found an academy of science there was defeated by the opposition of the Jesuits, but he now attained the honour he had coveted of an imperial privy councillorship (1712), and, either at this time or on a previous occasion (1709), was made a baron of the empire (*Reichsfreiherr*). Leibnitz returned to Hanover in September 1714, but found the elector George Louis had already gone to assume the crown of England. Leibnitz would gladly have followed him to London, but was bidden to remain at Hanover and finish his history of Brunswick.

During the last thirty years Leibnitz had been busy with many matters. Mathematics, natural science, philosophy, theology, history jurisprudence, politics (particularly the French wars with Germany, and the question of the

Spanish succession), economics and philology, all gained a share of his attention; almost all of them he enriched with original observations.

His genealogical researches in Italy — through which he established the common origin of the families of Brunswick and Este — were not only preceded by an immense collection of historical sources, but enabled him to publish materials for a code of international law. The history of Brunswick itself was the last work of his life, and had covered the period from 768 to 1005 when death ended his labours. But the government, in whose service and at whose order the work had been carried out, left it in the archives of the Hanover library till it was published by Pertz in 1843.

It was in the years between 1690 and 1716 that Leibnitz's chief philosophical works were composed, and during the first ten of these years the accounts of his system were, for the most part, preliminary sketches. Indeed, he never gave a full and systematic account of his doctrines. His views have to be gathered from letters to friends, from occasional articles in the *Acta Eruditorum*, the *Journal des Savants*, and other journals, and from one or two more extensive works. It is evident, however, that philosophy had not been entirely neglected in the years in which his pen was almost solely occupied with other matters. A letter to the duke of Brunswick, and another to Arnauld, in 1671, show that he had already reached his new notion of substance; but it is in the correspondence with Antoine Arnauld, between 1686 and 1690, that his fundamental ideas and the reasons for them are for the first time made clear. The appearance of Locke's *Essay* in 1690 induced him (1696) to note down his objections to it, and his own ideas on the same subjects. In 1703–1704 these were worked out in detail and ready for publication, when the death of the author whom they criticized prevented their appearance (first published by Raspe, 1765). In 1710 appeared the only complete and systematic philosophical work of his life-time, *Essais de Théodicée sur la bonté de Dieu*, *la liberté de l'homme*,

et l'origine du mal, originally undertaken at the request of the late queen of Prussia, who had wished a reply to Bayle's opposition of faith and reason. In 1714 he wrote, for Prince Eugene of Savoy, a sketch of his system under the title of *La Monadologie*, and in the same year appeared his *Principes de la nature et de la grâce*. The last few years of his life were perhaps more occupied with correspondence than any others, and, in a philosophical regard, were chiefly notable for the letters, which, through the desire of the new queen of England, he interchanged with Clarke, *sur Dieu*, *l'âme*, *l'espace*, *la durée*.

Leibnitz died on the 14th of November 1716, his closing years enfeebled by disease, harassed by controversy, embittered by neglect; but to the last he preserved the indomitable energy and power of work to which is largely due the position he holds as, more perhaps than any one in modern times, a man of almost universal attainments and almost universal genius. Neither at Berlin, in the academy which he had founded, nor in London, whither his sovereign had gone to rule, was any notice taken of his death. At Hanover, Eckhart, his secretary, was his only mourner; "he was buried," says an eyewitness, "more like a robber than what he really was, the ornament of his country." Only in the French Academy was the loss recognized, and a worthy eulogium devoted to his memory (November 13, 1717). The 200th anniversary of his birth was celebrated in 1846, and in the same year were opened the Königlichsächsische Gesellschaft der Wissenschaften and the Kaiserliche Akademie der Wissenschaften in Leipzig and Vienna respectively. In 1883, a statue was erected to him at Leipzig.

Leibnitz possessed a wonderful power of rapid and continuous work. Even in travelling his time was employed in solving mathematical problems. He is described as moderate in his habits, quick of temper but easily appeased, charitable in his judgments of others, and tolerant of differences of opinion, though impatient of contradiction on small matters.

He is also said to have been fond of money to the point of covetousness; he was certainly desirous of honour, and felt keenly the neglect in which his last years were passed.

Philosophy. — The central point in the philosophy of Leibnitz was only arrived at after many advances and corrections in his opinions. This point is his new doctrine of substance (), and it is through it that unity is given to the succession of occasional writings, scattered over fifty years, in which he explained his views. More inclined to agree than to differ with what he read (), and borrowing from almost every philosophical system, his own standpoint is yet most closely related to that of Descartes, partly as consequence, partly by way of opposition. Cartesianism, Leibnitz often asserted, is the ante-room of truth, but the ante-room only. Descartes's separation of things into two heterogeneous substances only connected by the omnipotence of God, and the more logical absorption of both by Spinoza into the one divine substance, followed from an erroneous conception of what the true nature of substance is. Substance, the ultimate reality, can only be conceived as force. Hence Leibnitz's metaphysical view of the monads as simple, percipient, self-active beings, the constituent elements of all things, his physical doctrines of the reality and constancy of force at the same time that space, matter and motion are merely phenomenal, and his psychological conception of the continuity and development of consciousness. In the closest connexion with the same stand his logical principles of consistency and sufficient reason, and the method he developed from them, his ethical end of perfection, and his crowning theological conception of the universe as the best possible world, and of God both as its efficient cause and its final harmony.

The ultimate elements of the universe are, according to Leibnitz, individual centres of force or monads. Why they should be individual, and not manifestations of one world-force, he never clearly proves. His doctrine

of individuality seems to have been arrived at, not by strict deduction from the nature of force, but rather from the empirical observation that it is by the manifestation of its activity that the separate existence of the individual becomes evident; for his system individuality is as fundamental as activity. “The monads,” he says, “are the very atoms of nature — in a word, the elements of things,” but, as centres of force, they have neither parts, extension nor figure (). Hence their distinction from the atoms of Democritus and the materialists. They are metaphysical points or rather spiritual beings whose very nature it is to act. As the bent bow springs back of itself, so the monads naturally pass and are always passing into action without any aid but the absence of opposition (). Nor do they, like the atoms, act upon one another (); the action of each excludes that of every other. The activity of each is the result of its own past state, the determinator of its own future (p, 722). “The monads have no windows by which anything may go in or out” ().

Further, since all substances are of the nature of force, it follows that— “in imitation of the notion which we have of souls” — they must contain something analogous to feeling and appetite. It is the nature of the monad to represent the many in one, and this is perception, by which external events are mirrored internally (). Through their own activity the monads mirror the universe (), but each in its own way and from its own point of view, that is, with a more or less perfect perception (); for the Cartesians were wrong in ignoring the infinite grades of perception, and identifying it with the reflex cognizance of it which may be called apperception. Every monad is thus a microcosm, the universe in little, and according to the degree of its activity is the distinctness of its representation of the universe (). Thus Leibnitz, borrowing the Aristotelian term, calls the monads *entelechies*, because they have a certain perfection (τὸ ἐντελές) and sufficiency (αὐτάρκεια) which make them sources of their internal actions and, so to speak, incorporeal

automata (). That the monads are not pure entelechies is shown by the differences amongst them. Excluding all external limitation, they are yet limited by their own nature. All created monads contain a passive element or *materia prima* (p, 687, 725), in virtue of which their perceptions are more or less confused. As the activity of the monad consists in perception, this is inhibited by the passive principle, so that there arises in the monad an appetite or tendency to overcome the inhibition and become more perceptive, whence follows the change from one perception to another (p, 714). By the proportion of activity to passivity in it one monad is differentiated from another. The greater the amount of activity or of distinct perceptions the more perfect is the monad; the stronger the element of passivity, the more confused its perceptions, the less perfect is it (). The soul would be a divinity had it nothing but distinct perceptions ().

The monad is never without a perception; but, when it has a number of little perceptions with no means of distinction, a state similar to that of being stunned ensues, the *monade nue* being perpetually in this state (). Between this and the most distinct perception there is room for an infinite diversity of nature among the monads themselves. Thus no one monad is exactly the same as another; for, were it possible that there should be two identical, there would be no sufficient reason why God, who brings them into actual existence, should put one of them at one definite time and place, the other at a different time and place. This is Leibnitz's principle of the *identity of indiscernibles* (p, 755); by it his early problem as to the principle of individuation is solved by the distinction between genus and individual being abolished, and every individual made *sui generis*. The principle thus established is formulated in Leibnitz's law of continuity, founded, he says, on the doctrine of the mathematical infinite, essential to geometry, and of importance in physics (p, 105), in accordance with which there is neither vacuum nor break in nature, but "everything takes place by degrees" (), the

different species of creatures rising by insensible steps from the lowest to the most perfect form ().

As in every monad each succeeding state is the consequence of the preceding, and as it is of the nature of every monad to mirror or represent the universe, it follows () that the perceptive content of each monad is in "accord" or correspondence with that of every other (cf.), though this content is represented with infinitely varying degrees of perfection. This is Leibnitz's famous doctrine of pre-established harmony, in virtue of which the infinitely numerous independent substances of which the world is composed are related to each other and form one universe. It is essential to notice that it proceeds from the very nature of the monads as percipient, self-acting beings, and not from an arbitrary determination of the Deity.

From this harmony of self-determining percipient units Leibnitz has to explain the world of nature and mind. As everything that really exists is of the nature of spiritual or metaphysical points (), it follows that space and matter in the ordinary sense can only have a phenomenal existence (), being dependent not on the nature of the monads themselves but on the way in which they are perceived. Considering that several things exist at the same time and in a certain order of coexistence, and mistaking this constant relation for something that exists outside of them, the mind forms the confused perception of space (). But space and time are merely relative, the former an order of coexistences, the latter of successions (p, 752). Hence not only the secondary qualities of Descartes and Locke, but their so-called primary qualities as well, are merely phenomenal (). The monads are really without position or distance from each other; but, as we perceive several simple substances, there is for us an aggregate or extended mass. Body is thus active extension (p, 111). The unity of the aggregate depends entirely on our perceiving the monads composing it together. There is no such thing as an absolute vacuum or empty space, any more than there are indivisible

material units or atoms from which all things are built up (p, 186, 277). Body, corporeal mass, or, as Leibnitz calls it, to distinguish it from the *materia prima* of which every monad partakes (), *materia secunda*, is thus only a "phenomenon bene fundatum" (). It is not a *substantia* but *substantiae* or *substantiatum* (). While this, however, is the only view consistent with Leibnitz's fundamental principles, and is often clearly stated by himself, he also speaks at other times of the *materia secunda* as itself a composite substance, and of a real metaphysical bond between soul and body. But these expressions occur chiefly in the letters to des Bosses, in which Leibnitz is trying to reconcile his views with the doctrines of the Roman Catholic Church, especially with that of the real presence in the Eucharist, and are usually referred to by him as doctrines of faith or as hypothetical (see especially). The true vinculum *substantiale* is not the *materia secunda*, which a consistent development of Leibnitz's principles can only regard as phenomenal, but the *materia prima*, through which the monads are individualized and distinguished and their connexion rendered possible. And Leibnitz seems to recognize that the opposite assumption is inconsistent with his cardinal metaphysical view of the monads as the only realities.

From Leibnitz's doctrine of force as the ultimate reality it follows that his view of nature must be throughout dynamical. And though his project of a *dynamic*, or theory of natural philosophy, was never carried out, the outlines of his own theory and his criticism of the mechanical physics of Descartes are known to us. The whole distinction between the two lies in the difference between the mechanical and the dynamical views of nature. Descartes started from the reality of extension as constituting the nature of material substance, and found in magnitude, figure and motion the explanation of the material universe. Leibnitz, too, admitted the mechanical view of nature as giving the laws of corporeal phenomena (), applying also

to everything that takes place in animal organisms, even the human body (). But, as phenomenal, these laws must find their explanation in metaphysics, and thus in final causes (). All things, he says (in his *Specimen Dynamicum*), can be explained either by efficient or by final causes. But the latter method is not appropriate to individual occurrences, though it must be applied when the laws of mechanism themselves need explanation (). For Descartes's doctrine of the constancy of the quantity of motion (*i.e.* momentum) in the world Leibnitz substitutes the principle of the conservation of *vis viva*, and contends that the Cartesian position that motion is measured by velocity should be superseded by the law that moving force (*vis motrix*) is measured by the square of the velocity (p, 193). The long controversy raised by this criticism was really caused by the ambiguity of the terms employed. The principles held by Descartes and Leibnitz were both correct, though different, and their conflict only apparent. Descartes's principle is now enunciated as the conservation of momentum, that of Leibnitz as the conservation of energy. Leibnitz further criticizes the Cartesian view that the mind can alter the direction of motion though it cannot initiate it, and contends that the quantity of "*vis directiva*," estimated between the same parts, is constant () — a position developed in his statical theorem for determining geometrically the resultant of any number of forces acting at a point.

Like the monad, body, which is its analogue, has a passive and an active element. The former is the capacity of resistance, and includes impenetrability and inertia; the latter is active force (p, 687). Bodies, too, like the monads, are self-contained activities, receiving no impulse from without — it is only by an accommodation to ordinary language that we speak of them as doing so — but moving themselves in harmony with each other ().

The psychology of Leibnitz is chiefly developed in the *Nouveaux essais sur l'entendement humain*, written in answer to Locke's famous *Essay*, and criticizing it chapter by chapter. In these essays he worked out a theory of the origin and development of knowledge in harmony with his metaphysical views, and thus without Locke's implied assumption of the mutual influence of soul and body. When one monad in an aggregate perceives the others so clearly that they are in comparison with it bare monads (*monades nues*), it is said to be the ruling monad of the aggregate, not because it actually does exert an influence over the rest, but because, being in close correspondence with them, and yet having so much clearer perception, it seems to do so (). This monad is called the entelechy or soul of the aggregate or body, and as such mirrors the aggregate in the first place and the universe through it (). Each soul or entelechy is surrounded by an infinite number of monads forming its body (); soul and body together make a living being, and, as their laws are in perfect harmony — a harmony established between the whole realm of final causes and that of efficient causes () — we have the same result as if one influenced the other. This is further explained by Leibnitz in his well-known illustration of the different ways in which two clocks may keep exactly the same time. The machinery of the one may actually move that of the other, or whenever one moves the mechanician may make a similar alteration in the other, or they may have been so perfectly constructed at first as to continue to correspond at every instant without any further influence (p, 134). The first way represents the common (Locke's) theory of mutual influence, the second the method of the occasionalists, the third that of pre-established harmony. Thus the body does not act on the soul in the production of cognition, nor the soul on the body in the production of motion. The body acts just as if it had no soul, the soul as if it had no body (). Instead, therefore, of all knowledge coming to us directly or indirectly through the bodily senses, it is all developed by the

soul's own activity, and sensuous perception is itself but a confused kind of cognition. Not a certain select class of our ideas only (as Descartes held), but all our ideas, are innate, though only worked up into actual cognition in the development of knowledge (). To the aphorism made use of by Locke, "Nihil est in intellectu quod non prius fuerit in sensu," must be added the clause, "nisi intellectus ipse" (). The soul at birth is not comparable to a *tabula rasa*, but rather to an unworked block of marble, the hidden veins of which already determine the form it is to assume in the hands of the sculptor (). Nor, again, can the soul ever be without perception; for it has no other nature than that of a percipient active being (). Apparently dreamless sleep is to be accounted for by unconscious perception (); and it is by such insensible perceptions that Leibnitz explains his doctrine of pre-established harmony ().

In the human soul perception is developed into thought, and there is thus an infinite though gradual difference between it and the mere monad (). As all knowledge is implicit in the soul, it follows that its perfection depends on the efficiency of the instrument by which it is developed. Hence the importance, in Leibnitz's system, of the logical principles and method, the consideration of which occupied him at intervals throughout his whole career.

There are two kinds of truths — (1) truths of reasoning, and (2) truths of fact (p, 99, 707). The former rest on the principle of identity (or contradiction) or of possibility, in virtue of which that is false which contains a contradiction, and that true which is contradictory to the false. The latter rest on the principle of sufficient reason or of reality (*compossibilité*), according to which no fact is true unless there be a sufficient reason why it should be so and not otherwise (agreeing thus with the *principium melioris* or final cause). God alone, the purely active monad, has an *a priori* knowledge of the latter class of truths; they have their source

in the human mind only in so far as it mirrors the outer world, *i.e.* in its passivity, whereas the truths of reason have their source in our mind in itself or in its activity.

Both kinds of truths fall into two classes, primitive and derivative. The primitive truths of fact are, as Descartes held, those of internal experience, and the derivative truths are inferred from them in accordance with the principle of sufficient reason, by their agreement with our perception of the world as a whole. They are thus reached by probable arguments — a department of logic which Leibnitz was the first to bring into prominence (p, 164, 168, 169, 343). The primitive truths of reasoning are identical (in later terminology, analytical) propositions, the derivative truths being deduced from them by the principle of contradiction. The part of his logic on which Leibnitz laid the greatest stress was the separation of these rational cognitions into their simplest elements — for he held that the root-notions (*cogitationes primae*) would be found to be few in number (p, 93) — and the designation of them by universal characters or symbols, composite notions being denoted by the formulae formed by the union of several definite characters, and judgments by the relation of aequipollence among these formulae, so as to reduce the syllogism to a calculus. This is the main idea of Leibnitz's "universal characteristic," never fully worked out by him, which he regarded as one of the greatest discoveries of the age. An incidental result of its adoption would be the introduction of a universal symbolism of thought comparable to the symbolism of mathematics and intelligible in all languages (cf.). But the great revolution it would effect would chiefly consist in this, that truth and falsehood would be no longer matters of opinion but of correctness or error in calculation, (p, 84, 89, 93). The old Aristotelian analytic is not to be superseded; but it is to be supplemented by this new method, for of itself it is but the ABC of logic.

But the logic of Leibnitz is an art of discovery () as well as of proof, and, as such, applies both to the sphere of reasoning and to that of fact. In the former it has by attention to render explicit what is otherwise only implicit, and by the intellect to introduce order into the *a priori* truths of reason, so that one may follow from another and they may constitute together a *monde intellectuel*. To this art of orderly combination Leibnitz attached the greatest importance, and to it one of his earliest writings was devoted. Similarly, in the sphere of experience, it is the business of the art of discovery to find out and classify the primitive facts or data, referring every other fact to them as its sufficient reason, so that new truths of experience may be brought to light.

As the perception of the monad when clarified becomes thought, so the appetite of which all monads partake is raised to will, their spontaneity to freedom, in man (). The will is an effort or tendency to that which one finds good (), and is free only in the sense of being exempt from external control (p, 513, 521), for it must always have a sufficient reason for its action determined by what seems good to it. The end determining the will is pleasure (), and pleasure is the sense of an increase of perfection (). A will guided by reason will sacrifice transitory and pursue constant pleasures or happiness, and in this weighing of pleasures consists true wisdom. Leibnitz, like Spinoza, says that freedom consists in following reason, servitude in following the passions (), and that the passions proceed from confused perceptions (p, 269). In love one finds joy in the happiness of another; and from love follow justice and law. “Our reason,” says Leibnitz, “illumined by the spirit of God, reveals the law of nature,” and with it positive law must not conflict. Natural law rises from the strict command to avoid offence, through the maxim of equity which gives to each his due, to that of probity or piety (*honeste vivere*), — the highest ethical perfection, — which presupposes a belief in God, providence and a future life. Moral

immortality — not merely the simple continuity which belongs to every monad — comes from God having provided that the changes of matter will not make man lose his individuality (p, 466).

Leibnitz thus makes the existence of God a postulate of morality as well as necessary for the realization of the monads. It is in the *Théodicée* that his theology is worked out and his view of the universe as the best possible world defended. In it he contends that faith and reason are essentially harmonious (p, 479), and that nothing can be received as an article of faith which contradicts an eternal truth, though the ordinary physical order may be superseded by a higher.

The ordinary arguments for the being of God are retained by Leibnitz in a modified form (). Descartes's ontological proof is supplemented by the clause that God as the *ens a se* must either exist or be impossible (p, 177, 708); in the cosmological proof he passes from the infinite series of finite causes to their sufficient reason which contains all changes in the series necessarily in itself (p, 708); and he argues teleologically from the existence of harmony among the monads without any mutual influence to God as the author of this harmony ().

In these proofs Leibnitz seems to have in view an extramundane power to whom the monads owe their reality, though such a conception evidently breaks the continuity and harmony of his system, and can only be externally connected with it. But he also speaks in one place at any rate of God as the "universal harmony"; and the historians Erdmann and Zeller are of opinion that this is the only sense in which his system can be consistently theistic. Yet it would seem that to assume a purely active and therefore perfect monad as the source of all things is in accordance with the principle of continuity and with Leibnitz's conception of the gradation of existences. In this sense he sometimes speaks of God as the first or highest of the monads

(), and of created substances proceeding from Him continually by "fulgurations" () or by "a sort of emanation as we produce our thoughts."

The positive properties or perfections of the monads, Leibnitz holds, exist *eminenter*, *i.e.* without the limitation that attaches to created monads (), in God — their perception as His wisdom or intellect, and their appetite as His absolute will or goodness (); while the absence of all limitation is the divine independence or power, which again consists in this, that the possibility of things depends on His intellect, their reality on His will (). The universe in its harmonious order is thus the realization of the divine end, and as such must be the best possible (). The teleology of Leibnitz becomes necessarily a *Théodicée*. God created a world to manifest and communicate His perfection (), and, in choosing this world out of the infinite number that exist in the region of ideas (), was guided by the *principium melioris* (). With this thorough-going optimism Leibnitz has to reconcile the existence of evil in the best of all possible worlds. With this end in view he distinguishes () between (1) metaphysical evil or imperfection, which is unconditionally willed by God as essential to created beings; (2) physical evil, such as pain, which is conditionally willed by God as punishment or as a means to greater good (cf.); and (3) moral evil, in which the great difficulty lies, and which Leibnitz makes various attempts to explain. He says that it was merely permitted not willed by God (), and, that being obviously no explanation, adds that it was permitted because it was foreseen that the world with evil would nevertheless be better than any other possible world (). He also speaks of the evil as a mere set-off to the good in the world, which it increases by contrast (), and at other times reduces moral to metaphysical evil by giving it a merely negative existence, or says that their evil actions are to be referred to men alone, while it is only the power of action that comes from God, and the power of action is good ().

The great problem of Leibnitz's *Théodicée* thus remains unsolved. The suggestion that evil consists in a mere imperfection, like his idea of the monads proceeding from God by a continual emanation, was too bold and too inconsistent with his immediate apologetic aim to be carried out by him. Had he done so his theory would have transcended the independence of the monads with which it started, and found a deeper unity in the world than that resulting from the somewhat arbitrary assertion that the monads reflect the universe.

The philosophy of Leibnitz, in the more systematic and abstract form it received at the hands of Wolf, ruled the schools of Germany for nearly a century, and largely determined the character of the critical philosophy by which it was superseded. On it Baumgarten laid the foundations of a science of aesthetic. Its treatment of theological questions heralded the German *Aufklärung*. And on many special points — in its physical doctrine of the conservation of force, its psychological hypothesis of unconscious perception, its attempt at a logical symbolism — it has suggested ideas fruitful for the progress of science.

Bibliography. — (1) Editions: Up to 1900 no attempt had been made to publish the complete works. Several editions existed, but a vast mass of MSS. (letters, &c.) remained only roughly classified in the Hanover library. The chief editions were: (1) L. Dutens (Geneva, 1768), called *Opera Omnia*, but far from complete; (2) G. H. Pertz, *Leibnizens gesammelte Werke* (Berlin, 1843–1863) (1st ser. History, 4 vols.; 2nd ser. Philosophy, vol. i. correspondence with Arnauld, &c. ed. C. L. Grotefend; 3rd ser. Mathematics, 7 vols. ed. C. J. Gerhardt); (3) Foucher de Careil (planned in 20 vols. 7 published, Paris, 1859–1875), the same editor having previously published *Lettres et opuscules inédits de Leibniz* (Paris, 1854–1857); (4) Onno Klopp, *Die Werke von Leibniz gemäss seinem Handschriftlichen Nachlasse in der Königlichen Bibliothek zu Hannover* (1st series, Historico-

Political and Political, 10 vols. 1864–1877). The *Œuvres de Leibnitz*, by A. Jacques (2 vols. Paris, 1846) also deserves mention. The philosophical writings had been published by Raspe (Amsterdam and Leipzig, 1765), by J. E. Erdmann, *Leibnitii opera philos. quae extant Latina*, *Gallica*, *Germanica*, *omnia* (Berlin, 1840), by P. Janet (2 vols. Paris, 1866, 2nd ed. 1900), and the fullest by C. J. Gerhardt, *Die Philosophischen Schriften von G. W. Leibniz* (7 vols. 1875–1890); cf. also *Die kleineren philos. wichtigeren Schriften* (trans. with commentary, J. H. von Kirchmann, 1879). The German works had also been partly published separately; G. E. Guhrauer (Berlin, 1838–1840). Of the letters various collections had been published up to 1900, *e.g.*: C. J. Gerhardt (Halle, 1860) and *Der Briefwechsel von G. W. Leibnitz mit Mathematikern* (1899); *Corrispondenza tra L. A. Muratori e G. Leibnitz* (1899); and cf. *Neue Beiträge zum Briefwechsel zwischen D. E. Jablonsky und G. W. Leibnitz* (1899).

In 1900 it was decided by scholars in Berlin and Paris that a really complete edition should be published, and with this object four German and four French critics were entrusted with the preliminary task of correlating the MSS. in the royal library at Hanover. This process resulted in the preparation of the *Kritischer Katalog der Leibnitz-Handschriften zur Vorbereitung der interakademischen Leibnitz-Ausgabe unternommen* (1908), and also in certain other preliminary publications, *e.g.* L. Couturat, *Opuscules et fragments inédits* (1903); E. Gerland, *Leibnizens nachgelassene Schriften physikalischen, mechanischen und technischen Inhalts* (1906); Jean Baruzi, *Leibniz* (1909), containing unedited MSS. and a sketch-biography; cf. the same author's *Leibniz et l'organisation religieuse de la terre* (1907).

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Langley (London, 1894); the *Monadology and other Writings*, by R. Latta (Oxford, 1898).

Biographical. — The materials for the life of Leibnitz, in addition to his own works, are the notes of Eckhart (not published till 1779), the *Éloge* by Fontenelle (read to the French Academy in 1717), the "Eulogium," by Wolf, in the *Acta Eruditorium* for July 1717, and the "Supplementum" to the same by Feller, published in his *Otium Hannoveranum* (Leipzig, 1718). The best biography is that of G. E. Guhrauer, *G. W. Freiherr von Leibnitz* (2 vols. Breslau, 1842; *Nachträge*, Breslau, 1846). A shorter *Life of G. W. von Leibnitz, on the Basis of the German Work of Guhrauer*, has been published by J. M. Mackie (Boston, 1845). More recent works are those of L. Grote, *Leibniz und seine Zeit* (Hanover, 1869); E. Pfleiderer, *Leibniz als Patriot, Staatsmann, und Bildungsträger* (Leipzig, 1870); the slighter volume of F. Kirchner, *G. W. Leibniz: sein Leben und Denken* (Köthen, 1876); Kuno Fischer, vol. iii. in *Gesch. der neuern Philosophie* (4th ed. 1902).

Critical. — The monographs and essays on Leibnitz are too numerous to mention, but reference may be made to Feuerbach, *Darstellung*, *Entwicklung*, *und Kritik der Leibnitz'schen Phil.* (2nd ed. Leipzig, 1844); Nourrisson, *La Philosophie de Leibniz* (Paris, 1860); R. Zimmermann, *Leibnitz und Herbart: eine Vergleichung ihrer Monadologien* (Vienna, 1849); O. Caspari, *Leibniz' Philosophie beleuchtet vom Gesichtspunkt der physikalischen Grundbegriffe von Kraft und Stoff* (Leipzig, 1870); G. Hartenstein, "Locke's Lehre von der menschl. Erk. in Vergl. mit Leibniz' Kritik derselben dargestellt," in the *Abhandl. d. philol.-hist. Cl. d. K. Sächs. Gesells. d. Wiss.* vol. iv. (Leipzig, 1865); G. Class, *Die metaph. Voraussetzungen des Leibnitzischen Determinismus* (Tübingen, 1874); F. B. Květ, *Leibnitzens Logik* (Prague, 1857); the essays on Leibnitz in Trendelenburg's *Beiträge*, vols. ii. and iii. (Berlin, 1855, 1867); L. Neff, *Leibniz als Sprachforscher* (Heidelberg, 1870–1871); J. Schmidt, *Leibniz und Baumgarten* (Halle, 1875); D. Nolen, *La Critique de Kant et la Métaphysique de Leibniz* (Paris, 1875); and the exhaustive work of A. Pichler, *Die Theologie des Leibniz* (Munich, 1869–1870). Among the more recent works are: C. Braig, *Leibniz: sein Leben und die Bedeutung seiner Lehre* (1907); E. Cassirer, *Leibniz' System in seinem wissenschaftlichen Grundlagen* (1902); L. Couturat, *La Logique de Leibniz d'après des documents inédits* (1901); L. Davillé, *Leibniz historien* (1909); Kuno Fischer, *G. W. Leibniz* (1889); R. B. Frenzel, *Der Associationsbegriff bei Leibniz* (1898); R. Herbertz, *Die Lehre vom Unbewussten im System des Leibniz* (1905); H. Hoffmann, *Die Leibniz'che Religions-philosophie in ihrer geschichtlichen Stellung* (1903); W. Kabitz, *Die Philosophie des jungen Leibniz* (1909), a study of the development of the Leibnitzian system; H. L. Koch, *Materie und Organismus bei Leibniz* (1908); G. Niel, *L'Optimisme de Leibniz* (1888); Bertrand A. W. Russell, *A Critical Exposition of the Philosophy of Leibniz* (1900); F. Schmöger, *Leibniz in seiner Stellung zur tellurischen Physik* (1901); A. Silberstein, *Leibnizens Apriorismus in Verhältnis zu seiner Metaphysik* (1904); Stein, *Leibniz und Spinoza* (1890); F. Thilly, *Leibnizens Streit gegen Locke in Ansehung der angeborenen Ideen* (1891); R. Urbach, *Leibnizens Rechtfertigung des Uebels in der besten Welt* (1901); W. Werckmeister, *Der Leibnizsche*

Substanzbegriff (1899); F. G. F. Wernicke, *Leibniz' Lehre von der Freiheit des menschlichen Willens* (1890).

Neustädter Hof- und Stadtkirche St. Johannis, Hanover — Leibniz' final resting place

Leibniz' grave